Basel Committee
on Banking Supervision

Regulatory Consistency Assessment Programme (RCAP)

Assessment of Basel III LCR regulations – Canada

October 2017

BANK FOR INTERNATIONAL SETTLEMENTS

Note that this report refers to the RCAP grades prior to October 2025. The grade 'materially non-compliant (MNC)', ie one notch above the lowest grade, has since been renamed to 'partially non-compliant (PNC)' for greater clarity

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Glossary

ALA	Alternative liquidity approach
BIS	Bank for International Settlements
C	Compliant (grade)
CAD	Canadian dollar
CDIC	Canadian Deposit Insurance Corporation
CFP	Contingency funding plan
CHT	Canada Housing Trust
CMB	Canada mortgage bond
CMHC	Canada Mortgage and Housing Corporation
CSSF	Surveillance Commission for the Financial Sector
D-SIB	Domestic systemically important bank
FAQ	Frequently asked question
G-SIB	Global systemically important bank
HQLA	High-quality liquid assets
LAR	Liquidity Adequacy Requirements
LC	Largely compliant (grade)
LCR	Liquidity Coverage Ratio
MNC	Materially non-compliant (grade)
NC	Non-compliant (grade)
NCCF	Net Cumulative Cash Flow
NHA	National Housing Act
NHA MBS	National Housing Act Mortgage-Backed Securities
OSFI	Office of the Superintendent of Financial Institutions
PSE	Public sector entity
RCAP	Regulatory Consistency Assessment Programme
RWA	Risk-weighted assets
SIG	Supervision and Implementation Group

Preface

The Basel Committee on Banking Supervision (Basel Committee) places a high priority on the implementation of regulatory standards underpinning the Basel III framework. The prudential benefits from adopting Basel standards can only fully accrue if these are implemented appropriately and consistently by all member jurisdictions. The Committee established the Regulatory Consistency Assessment Programme (RCAP) to monitor, assess and evaluate its members' implementation of the Basel framework.

This report presents the findings of an RCAP assessment on the domestic adoption of the Basel Liquidity Coverage Ratio (LCR) standard in Canada and its consistency with the minimum requirements of the Basel III framework. The assessment focuses on the rules applied to Canadian banks that are internationally active and of significance to domestic financial stability, in particular the consistency and completeness of the Canadian regulations with the Basel minimum requirements. It is based on the Canadian regulations in force on 30 June 2017. Issues relating to prudential outcomes, the liquidity position of individual banks or the supervisory effectiveness of the Canadian authorities were not in the scope of this RCAP assessment.

Starting in January 2017, the assessment comprised (i) completion of an RCAP questionnaire (a self-assessment) by OSFI (January to February 2017); (ii) an assessment phase (February to May 2017); and (iii) a review phase (June to October 2017). During the second phase, the Assessment Team reviewed documents, data and explanations provided by the Canadian authorities. The Assessment Team also conducted an on-site assessment, during which it discussed the implementation of the LCR with the Canadian authorities and representatives of Canadian banks. These exchanges enriched the Assessment Team's understanding of the Canadian LCR regulations. The third stage comprised a two-stage technical review of the assessment findings: first, by a separate RCAP Review Team, as well as feedback from the Basel Committee's Supervision and Implementation Group (SIG); and, second, by the RCAP Peer Review Board and the Basel Committee. This review process is a key part of the RCAP, providing quality control and ensuring the integrity of the assessment findings.

Where domestic regulations and provisions were found to be non-compliant with the Basel framework, those deviations were evaluated for their current and potential impact (or non-impact) on the reported LCRs of a sample of Canadian banks. The assessment outcome was based on the materiality of findings and expert judgment.

The report has three sections and a set of annexes: (i) an executive summary with a statement from the Canadian authorities on the assessment outcome; (ii) the context, scope and methodology, together with the main assessment findings; and (iii) details of the deviations and their materiality along with other assessment-related observations.

The RCAP Assessment Team was led by Mr Claude Wampach, Head of Risk Management (Banking Supervision) of the Surveillance Commission for the Financial Sector (CSSF) of Luxembourg. The Assessment Team comprised two technical experts from Spain and the United Kingdom. The main counterpart for the assessment was the Office of the Superintendent of Financial Institutions (OSFI). The work was coordinated by the Basel Committee Secretariat with support from staff at the CSSF.

The Assessment Team acknowledges the professional cooperation received from the Canadian authorities throughout the assessment process. In particular, the team sincerely thanks the staff of OSFI for coordinating the exercise and the series of comprehensive briefings and clarifications received, as well as the representatives of Canadian banks that provided information. The Assessment Team is hopeful that the RCAP assessment will contribute to the sound initiatives already undertaken by the Canadian authorities and to strengthening further the prudential effectiveness of the LCR in Canada.

Executive summary

In Canada, the LCR applies to all internationally active banks and most domestic banks.[1] It was implemented via OSFI's Liquidity Adequacy Requirements (LAR) Guideline in November 2014, taking effect in January 2015. OSFI also implemented LCR disclosure requirements for domestic systemically important banks (D-SIBs) in 2014; these took effect from mid-2015.

Overall, as of 30 June 2017, the LCR regulations in Canada are assessed as compliant with the Basel LCR standards. This is the highest possible grade. All four components, the definition of high-quality liquid assets (HQLA), liquidity outflows, liquidity inflows and disclosure requirements, are also assessed as compliant.

This report identifies one issue where further guidance from the Basel Committee is sought (Annex 11). The Basel LCR definition of Level 1 HQLA includes marketable securities representing claims on or guaranteed by sovereigns, subject to those securities meeting certain conditions, including the provision that the securities cannot be an obligation of a financial institution. According to an accompanying footnote, this means that the holder of the security must not have recourse to the financial institution. In Canada, for instance, this provision is relevant for the securities issued by banks under the National Housing Act Mortgage-Backed Securities (NHA MBS) programme, which are included in Level 1 assets under the Canadian LCR regulations. However, in common law jurisdictions, such as Canada, recourse to the issuer generally exists. In such cases, a literal reading of the Basel standard would imply that no bank-issued government-guaranteed security would qualify as Level 1 HQLA. The Assessment Team believes that the Committee should clarify the meaning of "recourse" in relation to HQLA eligibility. In line with the RCAP methodology, pending clarification, this issue has been taken out of the scope of the assessment.

In addition to the formal assessment of the LCR standard and disclosure requirements, this report contains annexes that summarise Canada's implementation of the LCR monitoring tools and the Basel Committee's *Principles for sound liquidity risk management and supervision* (see Annexes 9 and 10). Further, Annex 13 summarises the key national discretions and approaches that OSFI has adopted when implementing the LCR. These annexes show how national authorities implement certain aspects of the Basel standards that are not in the scope of the formal RCAP-LCR assessment. Over time, the information in these annexes will provide a basis for designing sound practices and additional supervisory guidance that will benefit the regulatory community and the banking industry. This should raise the consistency of LCR implementation and improve the ratio's effectiveness in practice.

[1] Some smaller non-internationally active institutions are exempt from the LCR requirements, as discussed in Section 1.1.

Response from the Canadian authorities

We wish to express our sincerest gratitude to Mr Claude Wampach and the entire Assessment Team for their professionalism and thoroughness during their review of the Canadian LCR rules, which led to productive and insightful discussions about the implementation of the LCR as a minimum standard in Canada.

We welcome and share the assessment that the implementation of the LCR is compliant with the Basel LCR standard, both for all of the individual key components and overall. This reflects our decision to incorporate the Basel LCR standard both in substance and in form into our domestic Liquidity Adequacy Requirements (LAR) Guideline.

We fully support the RCAP process put in place by the Basel Committee, which strives to foster a consistent implementation of Basel standards across jurisdictions, and remain committed to cooperating and participating in future RCAP assessments.

1 Assessment context and main findings

1.1 Context

Status of implementation

OSFI is responsible for the implementation of the LCR in Canada. It implemented the LCR framework via the LAR Guideline and Guideline D-11 on disclosure requirements during 2014. The requirements took effect in 2015. The Canadian authorities did not phase in the application of the minimum LCR requirement; instead, all banks had to meet a minimum LCR requirement of 100% from 1 January 2015.

The LAR Guideline is generally applicable to all Canadian banks, federally regulated trust or loan companies, bank holding companies and cooperative retail associations. They include the six Canadian domestic systemically important banks (D-SIBs), which are the only banks that OSFI considers to be internationally active. Some smaller non-internationally active institutions are exempt from the LCR requirements.[2] The LCR disclosure requirements apply only to D-SIBs.

The Basel standard allows jurisdictions that have a structural shortfall in HQLA to implement an Alternative Liquidity Approach (ALA). At the time of the assessment, the Canadian authorities have not implemented an ALA.

Structure of the banking sector

As of October 2016, there were 116 banks operating in Canada, with assets and off-balance sheet exposures of around 5.4 trillion Canadian dollars (CAD). The financial system is dominated by the six largest banks, which have been designated as D-SIBs. These banks comprise more than 90% of the exposures of the Canadian banking system and all of the exposures of Canadian internationally active banks. The RCAP Assessment Team focused on these banks in evaluating the materiality of its findings.

Regulatory system and model of supervision

OSFI is the sole prudential regulator in Canada. It is an independent government agency, funded by levies on the firms that it regulates. It reports to Parliament through the Minister of Finance. OSFI has been responsible for banking regulation and supervision since it was established in 1987. The Bank of Canada and the Department of Finance both have complementary responsibilities for financial stability.

In addition to the supervision of minimum liquidity requirements, OSFI monitors the banks' liquidity position using the Basel liquidity monitoring tools. OSFI has also implemented the Basel monitoring tools for intraday liquidity management in the LAR Guideline and is in the process of designing accompanying reporting templates (together with other Canadian authorities). The monitoring of liquidity conducted by OSFI is explained in more detail in Annex 9. Annex 10 describes the Canadian implementation of the Basel principles on sound liquidity risk management.

2 For example, banks that are themselves subsidiaries and (i) do not have a parent that is either a D-SIB or a foreign bank subsidiary; and (ii) whose operations are strictly in Canada and primarily Canadian dollar-related need not comply with the LCR (though their parents must). Also, certain non-internationally active institutions in wind-down or without intermediation or capital markets activities are exempted from the LCR.

1.2 Structure, enforceability and binding nature of prudential regulations

OSFI was established under the *Office of the Superintendent of Financial Institutions Act* (OSFI Act). This grants OSFI the power to issue guidance, in the form of Guidelines, Advisories and public letters. These documents are used to establish policy on minimum, best or prudent practices and to set out OSFI's expectations and requirements for banks.

Annex 2 lists main regulations implementing the LCR in Canada, as well as the hierarchy of regulations that may be issued by OSFI. Building upon the conclusions of the previous assessment of the implementation of the Basel risk-based capital standards in Canada, the Assessment Team considered all the regulations implementing the LCR in Canada (listed in Table A.1 in Annex 2) as binding for the nature of this assessment. An assessment of the binding nature of Canadian regulatory documents is set out in Annex 6.

1.3 Scope of the assessment

The Assessment Team considered the LCR requirements applicable to banks in Canada as of 30 June 2017. The assessment had two dimensions:

- a comparison of domestic regulations with the Basel LCR standards to ascertain that all the required provisions have been adopted (*completeness* of the Canadian domestic regulations); and
- whether there are any differences in substance between the domestic regulations and the Basel LCR standards and their significance (*consistency* of the Canadian regulations).

In its assessment, the Assessment Team considered all binding documents that effectively implement the Basel LCR standards in Canada, as provided by OSFI. Importantly, the assessment did not evaluate the adequacy of liquidity or resilience of the banking system in Canada or the supervisory effectiveness of the Canadian authorities.

Assessment grading and methodology

As per the RCAP methodology approved by the Basel Committee, the outcome of the assessment was summarised using a four-grade scale, both at the level of each of the four key components of the Basel LCR framework and the overall assessment of compliance. The four grades are: compliant, largely compliant, materially non-compliant and non-compliant.[3]

The materiality of the deviations was assessed in terms of their current or, where applicable, potential future impact (or non-impact) on banks' LCRs. The quantification was, however, limited to the agreed sample of banks. Wherever relevant and feasible, the Assessment Team, together with the Canadian authorities, attempted to quantify the impact based on data collected from the Canadian sample banks (see Annex 8). In addition to the available data, the assessment relied on expert judgment as to whether the domestic regulations met the Basel framework in letter and in spirit.

Ultimately, the assignment of the assessment grades was guided by collective expert judgment. In doing so, it relied on the general principle that the burden of proof rests with the assessed jurisdiction

[3] This four-grade scale is consistent with the approach used for assessing countries' compliance with the Basel Committee's *Core principles for effective banking supervision*. The actual definition of the four grades has been adjusted to take into account the different nature of the two exercises. In addition, components of the Basel framework that are not relevant to an individual jurisdiction may be assessed as not applicable. See www.bis.org/bcbs/implementation/rcap_role.htm for further details.

to show that a finding is not material or not potentially material. Section 2 describes the materiality analysis for each finding and it is summarised in Annex 8.

For interpretative issues that cannot be resolved during the assessment, the issue is taken out of the scope of the assessment and submitted to the Basel Committee for further guidance and clarification. Section 2.3, which contains observations specific to the implementation practices in Canada, also includes issues that have been taken out of the scope of the assessment. Pending clarification, these issues are not reflected in the assessment grades in this report.

The Canadian authorities did not phase in the LCR gradually and instead introduced a minimum of 100% from 2015. In this respect, the Canadian rules go beyond the minimum Basel standards (see Annex 12). This more rigorous implementation of the transitional aspects of the Basel framework has not been taken into account for the assessment of compliance, as per the agreed RCAP methodology.

1.4 Main findings

Overall, the Canadian LCR requirements are considered to be compliant with the Basel standard.

Summary of assessment grades — Table 2

Key component of the Basel LCR framework	Grade
Overall grade	C
Definition of high-quality liquid assets (numerator)	C
Definition of net outflows (denominator)	C
Definition of net inflows (denominator)	C
LCR disclosure requirements	C

Compliance assessment scale (see also Section 1.3): C (compliant), LC (largely compliant), MNC (materially non-compliant) and NC (non-compliant).

Main findings by component

High-quality liquid assets (numerator)

The Canadian rules on HQLA are compliant with the Basel standards. Only one finding remains, on the criteria for the eligibility of residential mortgage-backed securities (RMBS) in Level 2B HQLA. However, affected issuance is extremely small, so the finding does not have a material effect on Canadian banks' LCRs.

The assessment makes no determination as to the eligibility of bank-issued government-guaranteed securities as part of Level 1 HQLA, pending clarification by the Basel Committee on the meaning of "recourse" in paragraph 50(c)(iv) and footnote 16 of the Basel LCR standard (see Annex 11).

Outflows (denominator)

The rules on the definition of outflows in the Canadian LCR regulations are compliant with the Basel standards.

Inflows (denominator)

The Assessment Team considered the definition of inflows in the Canadian LCR regulations to be compliant with the Basel standards.

The Assessment Team observed that the Canadian regulations include an exemption from the 75% inflow cap for banks that do not act as direct clearers in the Canadian payments system. All internationally active banks in Canada are direct clearers, so this exemption is not relevant for the scope of this RCAP assessment.

Disclosure requirements

The Canadian LCR disclosure requirements are compliant with the Basel standards. The disclosure requirements are applied only to D-SIBs, which covers all banks in Canada that are internationally active.

2 Detailed assessment findings

The detailed findings of the Assessment Team on compliance of the Canadian LCR with the Basel framework are described below, component by component. Sections 2.1 and 2.2 focus on findings that were assessed to deviate from the Basel minimum standards, with an assessment of their materiality. Section 2.3 lists some observations on the specific implementation practices in Canada.

2.1 LCR

High-quality liquid assets (numerator)

Section grade	Compliant
Summary	One finding remains, on the absence of risk-retention requirements for RMBS issued privately in Canada. This market is very small and the impact on LCRs of the sample banks not material.
Basel paragraph number	54: risk retention requirements
Reference in the domestic regulation	LAR Guideline Chapter 2 paragraph 47 and accompanying OSFI Notes
Finding	The Basel LCR standard allows RMBS as Level 2B HQLA, subject to a 25% haircut and several conditions being met. One of these conditions is that securitisations are subject to risk retention regulations that require issuers to retain an interest in the assets securitised. In Canada, RMBS are included in Level 2B HQLA subject to the same haircut and conditions as the Basel standard. However, an OSFI Note clarifies that the Canadian authorities do not have specific retention regulations. Instead, enhanced disclosure and requirements to absorb the first loss are described as "examples where the principles of risk retention are met". These requirements are set out in OSFI's capital and disclosure Guidelines. The OSFI Note specifies that, for RMBS from foreign jurisdictions, local risk retention regulations should be followed. Although deduction of first loss and enhanced disclosure may mitigate some risks associated with securitisation structures, the Assessment Team does not consider these requirements to be risk retention requirements, because they do not require the bank to retain an interest in the securitisation. This may make the RMBS less marketable in times of stress, as investors may have doubts about the quality of the assets, especially relative to similar securitised assets that are subject to risk retention requirements. However, private RMBS issuance in Canada is extremely small and is not expected to increase significantly in the short or medium term (among other reasons, due to the significance of the NHA MBS programme). Information provided by OSFI showed that only two of the sample banks hold RMBS as Level 2B HQLA. In both cases, most RMBS are from foreign jurisdictions. Also, the absolute amounts of total RMBS are small relative to those banks' HQLA, in both cases comprising no more than 0.6% of HQLA.
Materiality	Not material

Outflows (denominator)

Section grade	Compliant
Summary	The Assessment Team found that the OSFI Guidelines follow the Basel standards for determining outflows allowed in the denominator of the LCR.

Inflows (denominator)

Section grade	Compliant
Summary	The Assessment Team found that the OSFI Guidelines follow the Basel standards for determining inflows allowed in the denominator of the LCR.

2.2 LCR disclosure requirements

Section grade	Compliant
Summary	The Assessment Team did not find any substantive differences between the Canadian LCR disclosure requirements and those set out in the Basel standards.

2.3 Observations specific to the implementation practices in Canada

The following observations highlight special features of the regulatory implementation of the Basel LCR standards in Canada. These are presented to provide additional context and information. Observations are considered compliant with the Basel standards and do not have a bearing on the assessment outcome. The section on HQLA also includes the description of a specific item that has been taken out from the scope of the assessment, pending guidance and clarification from the Basel Committee (see also Annex 11).

High-quality liquid assets (numerator)

Basel paragraph number	50(c): Level 1 HQLA
Reference in the domestic regulation	OSFI LAR Chapter 2, Paragraph 43 and accompanying OSFI Notes
Specific item taken out from the scope of the assessment	The Basel LCR standard defines assets eligible as Level 1 HQLA. These include marketable securities representing claims on or guaranteed by sovereigns, *subject to those securities meeting certain conditions*. One condition is that the securities *are not an obligation of a financial institution*. Footnote 16 explains that not being an obligation of a financial institution means that the holder of the security must not have recourse to the financial institution. In Canada, OSFI has incorporated the Basel definition of Level 1 HQLA into its LAR Guideline. The accompanying OSFI Notes state that "Securities issued under the National Housing Act Mortgage Backed Securities (NHA MBS) program may be included as Level 1 assets". The aim of the NHA MBS programme is to support the provision of mortgage loans at reasonable rates of interest and a more efficient secondary mortgage market. The parameters of the NHA MBS programme are established in law in the National Housing Act (NHA) and administered by the Canada Mortgage and Housing Corporation (CMHC). The CMHC is a Crown corporation and an agent for Her Majesty in right of Canada (ie the Government of Canada). This programme has been in place for 30 years and has a well established role in the Canadian financial system, with NHA MBS continuing to be issued and traded in times of stress. As of March 2017, according to the CMHC website, the NHA MBS programme had CAD 468 billion of

	outstanding issuance. Of this, CAD 224 billion was used to support issuances of Canada Mortgage Bonds (CMBs). The remaining CAD 244 billion NHA MBS are held by private investors, including large Canadian banks. Of CAD 155 billion NHA MBS held in the liquid assets buffer of the Canadian D-SIBs, CAD 133 billion are retained by the bank that originated the underlying mortgages. NHA MBS are created from pools of mortgages, which must meet several criteria, including being (directly or indirectly) insured by CMHC. Once the mortgages have been pooled and reviewed, the CMHC issues a certificate for the NHA MBS that records (i) the assignment of all rights, titles and interests on the mortgages from the financial institution to the CMHC; and (ii) a guarantee, issued by CMHC to the holder of the security, for the timely payment of the principal and interest on the security. After the security has been issued, a financial institution (in some cases, the originating bank) continues to service the mortgages, collecting and pursuing all payments and transferring each month those to a segregated account. Once a month, the CMHC's central payor and transfer agent transfers the coupon payment to the holders of the security. Any residual balances in the account may be retained by the servicer as a servicing fee. In the case of any shortfall, the servicer is responsible for covering the shortfall, paying it into the segregated account. The servicer is entitled to claim subsequently on the mortgage insurance policy. If the servicer does not or cannot make up the shortfall, the CMHC would make up the payment to the security holders under the NHA MBS timely payment guarantee. According to the CMHC, no security holder has ever invoked the timely payment guarantee, including in cases where issuers have defaulted (though it has paid out to mortgage servicers under mortgage insurance policies). The programme documentation provides clear recourse for investors to CMHC. In practice, NHA MBS are perceived and priced in the Canadian market as obligations of the government. The securities consistently trade at a small spread to Canadian government bonds, with the limited differences between issuers reflecting assumptions about prepayment patterns rather than credit risk. NHA MBS based on mortgages issued by struggling firms have also maintained spreads of a similar magnitude. However, there is no explicit prohibition on the investor pursuing the issuer. This reflects the general approach in common law jurisdictions (such as Canada). It is suggested that the Basel Committee clarifies the practical implications of the non-recourse clause in paragraph 50(c)(iv) of the Basel LCR standard (see Annex 11).

Inflows (denominator)

Basel paragraph number	144, 154 and 156: 75% cap and other wholesale inflows
Reference in the domestic regulation	LAR Guideline Chapter 2, Paragraphs 134 and 136 and accompanying OSFI Notes
Observation	Under the Basel LCR standard, inflows from financial institutions are treated at 0% for operational deposits and 100% for loans extended (including non-operational deposits). In addition, all inflows are capped in aggregate at 75% of total expected cash outflows. Where a bank is an indirect clearer, the OSFI Guidelines exempt certain inflows from the 75% inflow cap. In particular, indirect clearers do not include inflows related to non-operational clearing deposits when calculating the cap, nor those related to operational clearing deposits held at an OSFI-regulated direct clearer. In addition, OSFI allows indirect clearers to recognise a 25% inflow rate for those operational clearing deposits instead of the 0% rate permitted under the Basel LCR rules. The Basel standards apply to internationally active banks. The Canadian D-SIBs are the only internationally active banks in Canada and all are direct clearers (as are some other Canadian banks). Therefore, no internationally active bank can benefit from this exemption. OSFI considers it extremely unlikely that, in the future, OSFI's designation of any current D-SIB would change or that a direct clearer would become an indirect clearer, given the role of these large banks in the domestic market. It is also extremely unlikely that any bank that is currently an indirect clearer would become internationally active in the short or medium term. The largest indirect clearer is less than half the size of the smallest D-SIB (which itself has limited international activities). Any bank seeking to start international operations would also have to seek approval from OSFI for a change to its business plan and permissions.

LCR disclosure requirements

Basel paragraph number	9: scope of application
Reference in the domestic regulation	Guideline D-11, Section 1 – Scope of Application (page 2)
Observation	The Basel LCR disclosure requirements apply to all internationally active banks. In Canada, the LCR disclosure requirements apply to Canadian D-SIBs. Currently, these are the only internationally active banks in Canada. Therefore, at the current time, the scope of application is the same in substance as that required under the Basel standard. It is unlikely that any other Canadian banks will become internationally active in the short or medium term. The next largest Canadian bank that is not a D-SIB is less than half the size of the smallest D-SIB, which itself has limited international activities. Any other bank seeking to start international operations would also have to seek approval to OSFI for a change to its business plan and permissions.

Annexes

Annex 1: RCAP Assessment Team and Review Team

Assessment Team Leader

Mr Claude Wampach	CSSF, Luxembourg

Assessment Team members

Mr Graham Laber	Bank of England
Mr Guillermo Rodriguez García	Bank of Spain

Supporting members

Mr Joé Schumacher	CSSF, Luxembourg
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Ms Louise Eggett	Basel Committee Secretariat
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Mr Toshio Tsuiki	Basel Committee Secretariat
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Ms Anne Lécuyer	European Central Bank

Annex 2: Local regulations issued by Canadian authorities to implement Basel LCR

Overview of issuance dates of important Canadian liquidity regulations — Table A.1

Domestic regulations	Type, version and date
OSFI Act	Law enacted by the Canadian Parliament on 2 July 1987. Empowers OSFI as supervisor.
Liquidity Adequacy Requirements (LAR) Guideline	Guideline issued by OSFI in November 2014
Guideline D-11: Public Disclosure Requirements for Domestic Systemically Important Banks on Liquidity Coverage Ratio	Guideline issued by OSFI in July 2014

Source: OSFI.

Hierarchy of Canadian laws and regulatory instruments — Table A.2

Level of rules (in legal terms)	Description
Law	Enacted by the Canadian Parliament
Guidelines	Issued by OSFI. Guidelines establish minimum prudential practices.
Advisories	Issued by OSFI. Advisories clarify specific policy issues or describe how OSFI administers certain aspects of the prudential regime.
Rulings	Issued by OSFI. Rulings interpret certain provisions of other instruments.
Public Letters	Issued by OSFI. Public letters articulate OSFI's general policy in a specific area.
Implementation Notes	Issued by OSFI. These notes provide detailed guidance that would not be found in a formal guideline or advisory.
Discussion Papers	Issued by OSFI. Like public letters, discussion papers articulate OSFI's general policy in a specific area.

Source: Basel Committee, *RCAP Assessment of Basel III regulations – Canada*, June 2014, www.bis.org/bcbs/implementation/l2_ca.pdf.

Annex 3: List of Basel LCR standards used for the assessment

Basel documents in scope of the assessment

- *The Liquidity Coverage Ratio* (January 2013), including the *Frequently asked questions on Basel III's January 2013 Liquidity Coverage Ratio* (April 2014)
- *The Liquidity Coverage Ratio and restricted-use committed liquidity facilities* (January 2014)
- *Liquidity Coverage Ratio disclosure standards* (January 2014)

Basel documents reviewed for information purposes

- *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* (January 2013), part on liquidity risk monitoring tools only
- *Monitoring tools for intraday liquidity management* (April 2013)
- *Principles for sound liquidity risk management and supervision* (September 2008)

Annex 4: Details of the RCAP assessment process

Off-site evaluation

- Completion of a self-assessment questionnaire by the Canadian authorities
- Evaluation of the self-assessment by the RCAP Assessment Team
- Independent comparison and evaluation of the domestic regulations issued by the Canadian authorities with corresponding Basel standards issued by the Basel Committee
- Identification of observations
- Refinement of the list of observations based on clarifications provided by the Canadian authorities
- Assessment of materiality of deviations: for all quantifiable deviations, based on data and, for all non-quantifiable deviations, based on expert judgment
- Sending the list of observations to the Canadian authorities

On-site assessment

- Discussion of individual observations with the Canadian authorities
- Meeting with selected Canadian banks
- Discussion with the Canadian authorities and revision of findings to reflect additional information received
- Assignment of component grades and overall grade
- Submission of the detailed findings and grades to the Canadian authorities
- Receipt of comments on the detailed findings from the Canadian authorities

Review and finalisation of the RCAP report

- Review of comments by the RCAP Assessment Team, finalisation of the draft report and sending to the Canadian authorities for comments
- Review of the Canadian authorities' comments by the RCAP Assessment Team
- Review of the draft report by the RCAP Review Team
- Report of findings to the SIG by the Team Leader
- Review of the draft report by the Peer Review Board
- Approval of the report by the Basel Committee and publication

Annex 5: List of rectifications by the Canadian authorities

List of rectifications by the Canadian authorities — Table A.3

Basel paragraph	Reference in Canadian regulations	Description of the rectification
146	126	Within the OSFI Notes box to paragraph 126 of the LAR Guideline, two references to the word "outflow" have been revised to "inflow" to align with the intent of the description in this Notes box.
148	128	The reference to supervisors has been modified to refer to OSFI to reduce ambiguity about on whom the requirement is placed. Where relevant, other references to supervisors have been modified to "OSFI" within Chapter 2 of the LAR Guideline (eg OSFI paragraphs 44, 66, 73).

Annex 6: Assessment of the binding nature of regulatory documents issued by OSFI

The following table summarises the assessment of the seven criteria used to determine the eligibility of OSFI's regulatory instruments for the RCAP assessment. It is taken from the RCAP report on the Canadian adoption of the Basel risk-based capital standards, with a reference to liquidity added for criteria (i) and (v).[4] Based on the outcome of that previous assessment, the Assessment Team concluded that the regulatory instruments issued and used by OSFI to implement the LCR (OSFI Guidelines and Notes, as set out in Annex 2) are eligible for the RCAP assessment.

Criterion	Assessment
(i) The instruments used are part of a well defined, clear and transparent hierarchy and regulatory framework	The Bank Act (BA) and its supporting regulations provide a comprehensive framework for the setting and enforcing of minimum prudential standards for banks. For example, the BA sets, and empowers the Superintendent to set, minimum prudential standards upon incorporation and on an ongoing basis with respect to, among other things, ownership, governance, capital, liquidity, self-dealing, investments, specialised financing and borrowing. As a complement to this legislative framework, OSFI is administratively empowered to publish several forms of guidance, as described below, which serve to clarify the legislative, regulatory and supervisory frameworks, and to articulate OSFI's regulatory and supervisory expectations and best practices on matters within its discretion. As these forms of guidance are not legislative in nature, and are issued by OSFI at its discretion, they are not subject to direct influence from governmental or other bodies: **Guidelines**, which are used to establish minimum best or prudent practices, set out OSFI's expectations and requirements for banks in order to govern industry activities and behaviour. These include guidelines on the supervisory framework, solvency standards (eg adequacy of capital and liquidity), prudential standards (eg large exposure limits, portfolio mix, liquidity), accounting standards (eg non-accrual loans, impaired loans), and sound business and financial practices (eg corporate governance, legislative compliance); **Advisories**, which clarify the position of OSFI regarding certain policy issues or describe how OSFI generally administers and interprets provisions of the BA, regulations or guidelines. Banks are expected to consider the relevance of these advisories, which are not case-specific, to their own particular circumstances and to take action, if needed; **Rulings**, which describe how OSFI has applied or interpreted provisions of the BA, regulations or guidelines in specific cases; and **Discussion papers and public letters**, which articulate OSFI's general policy direction in a specific area. Guidelines, advisories and public letters are used to establish policy on minimum, best or prudent practices and set out OSFI's expectations and requirements for banks in order to govern industry activities and behaviour. Guidelines, advisories and public letters set standards for industry activities and behaviour, are generally static for a period of time ranging from one to several years, depending upon the need to incorporate revisions to reflect changes in the environment. Guidelines, advisories and public letters generally fit into one of four categories: capital, accounting, prudential limits and restrictions, and sound business and financial practices.
(ii) They are public and freely available.	OSFI publishes all prudential standards, including guidelines, advisories, public letters and public consultations on its website, www.osfi-bsif.gc.ca.

[4] See Annex 7 of *RCAP Assessment of Basel III regulations – Canada*, Basel Committee, June 2014, www.bis.org/bcbs/implementation/l2_ca.pdf.

(iii) They are viewed as binding by banks as well as by supervisors.	The forms of guidance are a means whereby OSFI is able to swiftly, explicitly, and outside the political process, articulate its supervisory expectations and how the requirements, including adequate prudential standards, of the BA should be met. While the guidelines, advisories and public letters are not directly enforceable in law, failure to meet them is indicative of failure to meet the underlying legal standard. If OSFI determines that a bank has not met the standard by other means, OSFI has sufficient tools to compel compliance. The guidelines, advisories and public letters are therefore indirectly enforceable under the law. In practice all instruments are viewed as equivalent to regulations by the industry. In order for this approach of indirect enforcement to be effective and lead to desired supervisory outcomes, it is essential for OSFI to closely monitor the industry's compliance with the instruments and to be prepared to increase supervisory pressure as soon as a non-compliant institution is identified.
(iv) They would generally be legally upheld if challenged.	Guidelines and other regulatory instruments have been in place since 1987 when OSFI was established. No legal challenge has ever been made as to their enforceability or reasonableness. While guidelines, advisories and public letters are not legally binding, any order issued as a result of failure to comply would be legally binding.
(v) They are supported by precedence of enforceability.	The guidelines, advisories and public letters are not legally binding per se, but if an institution were to fail to comply with them, OSFI could, for example, direct the institution, by order, to increase its capital or provide additional liquidity (eg under BA Section 485(3)(a)). Such an order would be legally binding. OSFI could also invoke other supervisory measures. OSFI has used the various tools (see next section) to ensure compliance and thus precedence has been set.
(vi) They are properly communicated and consequences of failure to comply are properly understood and carry a similar practical effect as for the primary law or regulation.	As part of the ongoing supervisory process, OSFI employs various tools (eg Supervisory Letters, discussions with management and the board of directors) to encourage companies to address concerns. Should this be insufficient, the BA provides the Superintendent with a wide range of discretionary enforcement powers, which are available in the event that prudential standards are not met. Examples of such powers include: special examinations, prudential agreements, directions of compliance, application to a court for an order of compliance and, ultimately, taking over control of the bank. In general, non-compliance with the provisions of the BA is also an offence that may be subject to certain sanctions, including criminal sanctions and civil monetary penalties that the Superintendent may impose under the *Administrative Monetary Penalties (OSFI) Regulations*. Enforcement of restrictions and directions of compliance can be pursued through the courts, if necessary. OSFI's legislative framework supports a risk-based approach to supervision. As such, the BA permits the Superintendent to apply quantitative and qualitative judgment when deciding which enforcement and/or corrective measures to use and to what degree. The intensity of supervisory action will depend on, and will be calibrated to, the nature, size, complexity and risk profile of the bank. For example, although OSFI's minimum capital requirements are uniform, the actual capital requirements vary by institution. Each institution is required to hold a unique level of capital, as is determined by the institution's activities, risk profile and systemic importance.
(vii) The instrument is expressed in clear language that complies with the Basel provisions in substance and spirit.	All regulatory instruments are written to be clear and concise so as to remove misinterpretation and aid enforcement. OSFI achieves compliance with Basel rules text by using the actual Basel language where it is appropriate. OSFI uses text boxes to elaborate on national discretion areas or to provide greater clarity to address unique circumstances (terminology, or accommodating the harmonisation of requirements across the banking and insurance sectors).

Annex 7: Key liquidity indicators of the Canadian banking system

Overview of Canadian banking sector liquidity as of 31 October 2016 — Table A.4

Size of banking sector (CAD millions)		
Total assets of all banks operating in Canada (including off-balance sheet exposures)	5,415,156	
Total assets of all locally incorporated internationally active banks	5,080,359	
Total assets of locally incorporated banks to which liquidity standards under the Basel framework are applied	5,414,778	
Number of banks		
Number of banks operating in Canada (excluding local representative offices)	116	
Number of global systemically important banks (G-SIBs)	0	
Number of D-SIBs[1]	6	
Number of banks which are internationally active[1]	6	
Number of banks required to implement Basel III liquidity standards	92	
Number of banks required to implement domestic liquidity standards	92	
Breakdown of LCR for the six RCAP sample banks (CAD millions)	**Unweighted**	**Weighted**
Total HQLA	846,046	779,550
Level 1 HQLA	657,332	657,332
Level 2A HQLA	114,104	96,988
Level 2B HQLA	84,059	42,530
ALA HQLA	-	-
Total cash outflows	5,324,618	876,663
Retail and small business stable deposits	497,309	15,077
Retail and small business less stable deposits	534,339	53,434
Wholesale unsecured operational deposits	326,970	79,556
Wholesale unsecured non-operational funding	380,044	205,361
Secured funding	564,345	93,153
Debt issued instruments (including credit and liquidity facilities)	782,430	251,923
Other contractual outflows	205,619	145,681
Contingent funding obligations	2,033,562	32,477
Total cash inflows	766,762	275,438
Secured lending[2]	336,238	57,130
Fully performing unsecured loans	74,221	44,320
Other cash inflows[3]	356,303	173,988
LCR		130%

[1] In Canada, all large internationally active banks are designated as D-SIBs and all D-SIBs are internationally active. There are currently six D-SIBs, all considered as sample banks for the purpose of the RCAP. [2] Excludes collateral swaps. [3] Includes collateral swaps.

Source: OSFI.

Annex 8: Materiality assessment

The outcome of the RCAP assessment is based on the materiality of the findings. As a general principle, and mirroring the RCAP assessment methodology for the risk-based capital standards, a distinction is made between quantifiable and non-quantifiable findings. The RCAP-LCR materiality assessment is based on both quantitative and qualitative information with an overlay of expert judgment. Where possible, teams also take into account the dynamic nature of liquidity risks and seek to address the materiality of any deviations at different points in time.

In line with underlying RCAP principles, the materiality assessment for quantifiable gaps is based on a determination of the cumulative impact of the identified deviations on the reported LCRs of banks in the RCAP sample. For non-quantifiable gaps, the Assessment Team relies on expert judgment only. Following this approach, the findings are classified as "not material", "potentially material" or "material". The following table summarises the deviations according to their materiality.

Number of deviations by component

Table A.5

Component	Not material	Potentially material	Material
HQLA (numerator)	1	0	0
Outflows (denominator)	0	0	0
Inflows (denominator)	0	0	0
LCR disclosure requirements	0	0	0

RCAP sample of banks

The following Canadian banks were selected for testing the materiality of quantifiable deviations. Together, these banks represent over 90% of the exposures of the Canadian banking system.

RCAP sample banks

Table A.6

Banking group	Share of banks' exposures in those of Canadian internationally active banks (per cent)
Bank of Montreal	15
Bank of Nova Scotia	20
Canadian Imperial Bank of Commerce	11
National Bank of Canada	5
Royal Bank of Canada	25
Toronto-Dominion Bank	24
Total	100

Source: OSFI. For this purpose, banking exposures are based on the measure of total exposures used in the leverage ratio, which includes both on- and off-balance sheet exposures.

Annex 9: Canada's implementation of the liquidity monitoring tools

In addition to the minimum standard for the LCR, the Basel liquidity framework outlines the metrics to be used to monitor liquidity risks ("the monitoring tools"). The monitoring tools capture specific information related to a bank's cash flows, balance sheet structure, available unencumbered collateral and certain market indicators. The monitoring tools supplement the LCR standard and are a cornerstone for supervisors in assessing the liquidity risk of a bank. This annex provides an overview of the implementation of the monitoring tools in Canada.

A list of the monitoring tools prescribed in the Basel Committee's guidelines and the most important corresponding monitoring tools prescribed by the Canadian authorities is shown in Table A.7.

Implementation of the Basel monitoring tools in Canada

as at 30 June 2017 — Table A.7

Basel Committee monitoring tool	Corresponding OSFI reporting template	Effective since	Frequency of submission	Deadline for submission
Contractual maturity mismatch	Net Cumulative Cash Flow (NCCF)	2008	Monthly	Within 14 days
Concentration of funding	Supplemental Liquidity Monitoring Template[1]	October 2015	Monthly	Within 21 days
Available unencumbered assets	NCCF	2008	Monthly	Within 14 days
	Collateral and Pledging Report (H4)[2]	July 2017	Monthly	Within 35 days
LCR by significant currency	LCR by significant currency (same format as LCR)	January 2015	Monthly	Within 14 days

[1] OSFI's Supplemental Liquidity Monitoring Template is currently provided by Canadian D-SIBs to OSFI and includes information on concentration of funding by significant depositor/counterparty.

[2] The H4 report is submitted to the Bank of Canada and provides data on collateral pledging, encumbered assets and available unencumbered assets, all segmented by HQLA subcategories.

Source: OSFI.

How are these reporting templates used by supervisors?

OSFI uses the monitoring tool templates noted above to analyse institutions' liquidity risk. As articulated in the LAR Guideline, OSFI uses a series of liquidity metrics – including the monitoring tools above, the LCR standard and NSFR standard (once implemented) and its own domestic monitoring tool (NCCF) – to assess the liquidity adequacy of an institution. OSFI evaluates the performance of an institution's liquidity metrics both as a package and individually when determining its overall assessment of an institution's liquidity adequacy. In addition, the series of liquidity metrics is supplemented by detailed supervisory assessments of other aspects of an institution's liquidity risk management framework in line with the Basel Committee's *Principles for sound liquidity risk management and supervision* and OSFI's *Guideline B-6: Liquidity Principles*. This ensures that the aspects of the OSFI's liquidity guidelines are well engrained in institutions' internal practices.

Further, the LAR Guideline (Chapter 1, paragraph 20) clarifies that the suite of liquidity monitoring tools are not standards and thus do not have defined minimum required thresholds. However, OSFI also notes that it reserves the right to set supervisory requirements for any of the suite of liquidity tools as required.

Brief explanation of the implementation of liquidity risk-related reporting templates

As noted in Table A.7, OSFI requires institutions to submit the monitoring tool templates on a monthly basis. The NCCF report, which focuses on the maturity mismatch monitoring tool as well as the available unencumbered assets tool, is to be reported within 14 days of the reference date as is the LCR by significant currency monitoring tool. This response deadline is commensurate with the response deadline for the LCR reporting template. The other monitoring tool templates are provided on a slightly longer timeframe but all generally within a one-month time frame.

Basel monitoring tools for intraday liquidity management

The Basel Committee issued a standard on monitoring tools for intraday liquidity management in April 2013. OSFI has included this guidance in its LAR Guideline (see Chapter 6). Canadian authorities, including OSFI, the Bank of Canada and Payments Canada, are in the process of designing reporting requirements that adhere to the Basel guidance. Some of the intraday metrics are already available in various payment system reports shared amongst Canadian authorities.

Annex 10: Canada's implementation of the *Principles of sound liquidity risk management and supervision*

This annex outlines the implementation of the Basel Committee's *Principles for sound liquidity risk management and supervision* in the Canadian liquidity framework. The principles are not part of the formal RCAP-LCR assessment and no grade is assigned. This description, provided by OSFI, is for information only.

OSFI's *Guideline B-6: Liquidity Principles* builds on the principles for sound liquidity risk management enunciated by the Basel Committee in its September 2008 guidance *Principles for Sound Liquidity Risk Management and Supervision*. The high-level principles articulated by the Basel Committee have been transposed directly into OSFI's Guideline B-6 (though renumbered slightly). In addition, OSFI has added text to further clarify its expectations in the Canadian context related to these principles. As such, OSFI expects that, in addition to meeting the requirements of Guideline B-6, Canadian deposit-taking institutions will also comply with the Basel principles' guidance. In addition, as with all of OSFI's risk management guidance, the overarching Corporate Governance Guideline would apply to the Liquidity Principles. All principles are assessed as part of OSFI's Supervisory Framework.

Fundamental principle for the management and supervision of liquidity risk – Principle 1

Under OSFI Principle 1 (which aligns with Basel Principle 1), OSFI clarifies that it expects institutions to have:

- a stated tolerance for liquidity risk, approved by the Board of Directors, that is reflected in documented liquidity and funding policies, business strategies, reporting frameworks, risk management and control functions;
- a suitable framework for the ongoing identification, measurement, management and monitoring of contingent liquidity requirements including:
  - the capacity to conduct hypothetical analyses of changes to funding requirements under combinations of extreme but plausible name-specific and market-wide stress scenarios; and
  - the maintenance of a cushion of high-quality, unencumbered liquid assets to be held against identified funding requirements under stress;
- formally documented contingency funding plans that reflect outcomes generated from liquidity risk stress-testing programmes;
- a framework for assigning the costs and benefits to the internal use and provision of liquidity;
- a funding strategy that assures diversification of funding sources across several dimensions such as products, tenors, legal entities and business lines and critically assesses the fungibility of foreign currencies;
- a methodology to manage intraday liquidity risk; and
- arrangements for public disclosure of liquidity positions, risks and the commensurate risk management practices undertaken.

Governance of liquidity risk management – Principles 2–4

The Basel Principles 2, 3 and 4 are addressed in OSFI Principles 2, 3 and 10, respectively.

The Board of Directors is responsible for the determination of the institution's liquidity risk tolerance. The stated liquidity risk tolerance should be consistent with the size, sophistication, business objectives, relevant funding markets and overall risk appetite of the institution. The liquidity risk tolerance should be reviewed at least annually and the ensuing liquidity management process or strategy reviewed more frequently. Moreover, the Board of Directors should review and approve senior management's articulation and communication of the institution's liquidity risk tolerance to all relevant levels of the organisation.

Senior management should be responsible for establishing and implementing well documented, sound and prudent liquidity management and funding policies. Policies should be recommended by senior management to the Board of Directors and be subject to its approval and subsequent annual review. An institution's documented liquidity policies, which collectively articulate the importance senior management places on liquidity and its use in achieving business objectives, should be communicated and understood at all relevant levels of the organisation. In particular, these policies should capture decisions around: the degree of centralisation of liquidity management; asset, liability and off-balance sheet instrument composition; funding source diversification; quantitative regulatory minimums in relevant jurisdictions; processes for determining, reviewing, approving and applying stress test scenarios and related assumptions; the size and composition of a stock of liquid assets that is available to generate cash in a stress environment; contingency funding plans; intraday liquidity management; management of collateral including pledging and apportionment; and limit-setting, the process for escalating exceptions and review of applicability.

Senior management should ensure that the institution has adequate internal controls whereby liquidity risk oversight responsibilities should be assigned to an entity that is independent of business operations.

Regarding Basel Principle 4, for purposes of measuring business performance and maintaining proper incentives, all institutions should have the capacity to assign a liquidity cost or benefit to different business activities, including new products, in terms of funding requirements, risks or provisions. Larger and more sophisticated organisations are expected to incorporate the cost and benefits of liquidity into internal funds transfer pricing programmes.

Measurement and management of liquidity risk – Principles 5–12

OSFI articulates these Basel principles through OSFI Principles 4–9 and 11–12.

As regards Basel Principle 5, OSFI in its Principle 5 notes that a sound framework for identifying, measuring, managing and monitoring sources and uses of liquidity and the commensurate risk should have several dimensions including, among other items:

- a rigorous and comprehensive liquidity measurement programme that is integrated within the liquidity management strategy and contingency funding plans of the institution;
- a contingency funding plan that addresses stress-testing result outcomes and is effective at managing any elevation of funding and market liquidity risk;
- processes around (i) internal limit-setting and controls consistent with the institution's articulated risk tolerance; (ii) risk-taking incentives of individual business lines to ensure they are aligned with the liquidity risk exposures, whether structural or contingent, they create for the institution; and (iii) managing access to a diversified set of funding sources and tenors; and
- systems requirements and the necessary personnel to ensure timely measuring, monitoring and reporting of liquidity positions against limits to senior management and, as required, to the Board of Directors for appropriate action and response.

Concerning Basel Principle 6, OSFI clarifies in its Principle 4 that, irrespective of the choice between centralised or decentralised liquidity management for institutions with operations in several jurisdictions, head office management should retain the ability to monitor and control enterprise-wide liquidity across appropriate time horizons. Moreover, an institution should document its management of foreign currency positions in its liquidity policies when foreign currency funding or asset denomination, in aggregate, represents more than 5% of total funding or total assets. In addition to developing processes for sustaining continuous access to liquidity for all legal entities in the event of a funding shortfall, this policy should describe (i) any limits (eg fungibility, credit) established between operating units; (ii) any internal liquidity support arrangements (ie intra-group transfers) that may be provided; and (iii) how the institution's policies address potential transferability constraints that are imposed by host regulators.

To capture the Basel principle related to managing market access (Principle 7) OSFI (Principle 11) expects an institution to periodically review its efforts to maintain the diversification of liabilities, to establish relationships with liability holders, and to develop asset-sales markets. It should establish an ongoing presence in different funding markets and monitor market developments to take anticipatory action such as lengthening its funding profile. Further, OSFI notes that developing markets for asset sales or exploring arrangements under which an institution can borrow against assets is another element of managing market access.

Regarding intraday liquidity risk (Basel Principle 8) OSFI (Principle 12) expects that institutions understand the liquidity implications of a payments system disruption and have contingency plans to manage around it. Institutions should design stress scenarios that reflect such events and use the outcomes as a basis for construction of a contingency plan including, potentially, the development of back-up service arrangements to avoid cash flow bottlenecks.

OSFI (Principle 8) discusses encumbrance (Basel Principle 9) via the expectation that an institution's policies should consider when determining a stock of liquid assets (whether per the LCR definition or other) the existence of encumbrances that would prevent a quick sale to meet unanticipated net cash outflow requirements. Re-assessments of actual encumbrance and the potential for assets making up the stock to become encumbered should also be conducted. If such assessments cannot be conducted, the institution should hold a larger stock of liquid assets or impose lower liquidity values to compensate for uncertainty of encumbrance.

Further, OSFI expects institutions to comply with OSFI-mandated internal policies on the pledging of assets. Institutions should actively monitor their pledging and apportionment of assets to clearing and settlement organisation, as part of their ongoing liquidity management programme.

Stress testing (Basel Principle 10) is an important liquidity risk management principle. OSFI (Principle 6) expects institutions to develop a comprehensive liquidity stress-testing programme that considers multiple scenarios of varying degrees of stress and time horizons, including name-specific events, market-wide disruptions and combinations of the two. The outcomes of such stress test exercises should be compared against the stated risk tolerance of the institution; integrated into management decisions including limit-setting and internal transfer pricing systems; and affect the design of contingency funding plans, including the determination of action plans allowing for the rapid escalation of information and implementation of a coordinated tactical response by an institution to the liquidity stress.

Basel Principle 11 related to contingency funding plans (CFPs) is addressed in OSFI Principle 9. OSFI clarifies that an institution's ability to withstand liquidity disruptions (whether name-specific or market-wide) depends on the calibre of its formal contingency plans. Thus, OSFI articulates a series of components institutions are expected to incorporate in their contingency funding plan framework. Further, the development and ongoing maintenance of CFPs should be integrated within the institution's programme for stress testing liquidity risk. CFPs should be reviewed and tested regularly to ensure effectiveness and operational feasibility, with the results of such tests reported to senior management at a minimum annually and the Board of Directors as required. Finally, institutions are expected to notify OSFI upon the initialisation or de-escalation of a CFP.

In its Guideline B-6, OSFI (Principle 7) includes Basel Principle 12 in noting its expectation that institutions maintain a diverse stock of high-quality, unencumbered assets that are liquid (eg they are traded in broad and active secondary markets and can be demonstrated to be liquidated through their sale, or pledged through a repurchase agreement at all times, to a wide range of counterparties without incurring a substantial discount) to satisfy potential funding gaps. In addition, these assets should share the common characteristics of, but are not limited to, instruments that are eligible at central banks for open market operations and marketability. These conditions are necessary in order to assure their status as dependable sources of cash flow under a diverse set of stress contingencies. The stock of liquid assets should be designed in order to ensure continuous compliance with both internal stress tests and any prescribed regulatory stress test requirements.

Public disclosure – Principle 13

Canadian internationally active banks disclose quantitative and qualitative information on a quarterly basis, which aids market participants in assessing their liquidity positions and the quality of their liquidity risk management practices. OSFI requires these institutions to publicly report information that can be used by market participants in their review of an institution's liquidity risk profile. Expectations for public disclosure are featured in OSFI Principle 13 of Guideline B-6. In addition, in July 2014, OSFI issued *Guideline D-11: Public Disclosure Requirements for Domestic Systemically Important Banks on Liquidity Coverage Ratio* which requires Canadian D-SIBs to publically disclose their LCRs and various LCR components on a quarterly basis.

The role of supervisors – Principles 14–17

The Basel principles related to the role of supervisors are not explicitly noted in OSFI's Guideline B-6. However, according to OSFI, there is a well established and rigorous supervisory review programme that assesses the adequacy of liquidity positions and liquidity risk management practices at all Canadian deposit-taking institutions. This supervisory review work includes ongoing continuous monitoring of institution activities through dedicated supervisory staff and targeted review work related to risk management practice. Assessments of institutions related to liquidity risk are tailored to the size and complexity of the institution and consider the systemic importance of the institution.

OSFI has access to a wide range of information provided by supervised deposit-taking institutions, together with market information. OSFI requires supervised institutions to submit detailed regulatory reports on a regular basis and engages institutions in regular correspondence on matters related to liquidity risk.

When assessing the liquidity positions and liquidity risk management practices at supervised institutions, OSFI provides feedback to the institutions and requires the effective and timely remediation of any deficiencies observed.

OSFI communicates with other federal authorities, including the Bank of Canada and the Canadian Deposit Insurance Corporation (CDIC), on supervisory issues on an ongoing basis. OSFI also communicates with foreign supervisors, including but not limited to participation in supervisory colleges.

Annex 11: Areas for further guidance from the Basel Committee

The Basel LCR definition of Level 1 HQLA includes marketable securities representing claims on or guaranteed by sovereigns, subject to those securities meeting certain conditions.

Those conditions include that the securities are not an obligation of a financial institution or any of its affiliated entities. Footnote 16 explains that "this requires that the holder of the security must not have recourse to the financial institution or any of the financial institution's affiliated entities. In practice, this means that securities, such as government-guaranteed issuance during the financial crisis, which remain liabilities of the financial institution, would not qualify for the stock of HQLA. The only exception is when the bank also qualifies as a [public sector entity, or PSE] under the Basel II Framework where securities issued by the bank could qualify for Level 1 assets if all necessary conditions are satisfied."

FAQ 14(a), published in July 2011, clarified the reasoning behind this criterion. It stated that "the holder of the security must not have recourse to a financial institution or any of the financial institution's affiliated entities as these instruments are highly likely to be illiquid in the LCR scenario."[5] The final LCR standard in January 2013 incorporated the FAQs from 2011. The current Basel LCR FAQs (published in April 2014 and June 2017) no longer contain FAQ 14(a), which appears to have been incorporated into the standard by the addition of footnote 16.

Canadian NHA MBS issued by banks satisfy the Basel LCR criteria within the meaning of FAQ 14(a), which focuses on wrong-way risk. But, under common law, recourse to the issuer generally exists. In such jurisdictions, under a literal reading of the LCR standard, no bank-issued government-guaranteed security could qualify as Level 1 HQLA (unless the issuing bank qualifies as a PSE).

A clarification by the Committee on the eligibility of (non-PSE) bank-issued government-guaranteed securities could support the consistency of national LCR implementation.

[5] *Basel III framework for liquidity – Frequently Asked Questions*, Basel Committee, July 2011, www.bis.org/publ/bcbs199.htm.

Annex 12: Areas where Canadian LCR rules are stricter than the Basel standards

In one place, the Canadian authorities have adopted a stricter approach than the minimum standards prescribed by the Basel Committee. Specifically, OSFI required the minimum LCR requirement for Canadian institutions to be set at 100% beginning 1 January 2015. In this area, OSFI did not allow a phase-in period of the LCR minimum required level, as would be permitted in the Basel LCR framework.

This stricter rule has not been taken into account as a mitigant for the overall assessment of compliance.

Annex 13: Implementation of LCR elements subject to prudential judgment or discretion in Canada

The following tables provide information on elements of LCR implementation that are subject to prudential judgment and national discretion. The information provided helps the Basel Committee to identify implementation issues where clarifications and additional frequently asked questions could improve the quality and consistency of implementation. It should also inform the preliminary design of any peer comparison of consistency across the membership that the Committee may decide to conduct, in similar fashion to the studies on variation in risk-weighted assets for the risk-based capital standards.

Elements requiring judgment (non-exhaustive list) — Table A.8

Basel paragraph	Description	Implementation by OSFI
24f	Treatment of the concept of "large, deep and active markets"	OSFI's LAR Guideline (Chapter 2, paragraph 12) incorporates this as a characteristic for HQLA. OSFI considers an asset as being traded in "large, deep and active markets" where there is historical evidence of market breadth and market depth such as where the asset has low bid-ask spreads, high trading volumes, and a large and diverse number of market participants. In addition, OSFI outlines that assets should have active outright sale or repo markets at all times.
50	Treatment of the concept of "reliable source of liquidity"	OSFI's LAR Guideline has incorporated this concept as a precondition for inclusion in HQLA, copying the Basel text. The maximum levels of a decline in price/increase in haircut for Level 2 assets during periods of significant liquidity stress are set at the same level as the Basel standard – ie 10% for Level 2A, 20% for non-financial equities in Level 2B and 40% for non-financial equities in Level 2B.
52	Treatment of the concept of "relevant period of significant liquidity stress"	The LAR Guideline does not provide additional guidance; rather, it applies the concept of relevant period of significant liquidity stress in the HQLA requirements relating to price decline and maximum haircut for both Level 2A and Level 2B HQLA. This is consistent with the principles-based approach taken throughout the guideline.
74–84	"Stable" and "less stable" retail deposits	OSFI segments retail deposits into the "stable" and "less stable" categories based on the criteria outlined in the LCR rules text issued by the Basel Committee. Per LAR Guideline, Chapter 2, paragraph 55, stable deposits refer to the amount of the retail deposits that are fully insured by an effective deposit insurance scheme or by a public guarantee that provides equivalent protection and where: • the depositors have other established relationships with the bank that make deposit withdrawal highly unlikely; or • the deposits are in transactional accounts. Less stable deposits refer to the portion of retail deposits that does not fall within the category of stable deposits.
83 (retail), 86 (wholesale)	Treatment of the possibility of early withdrawal of funding with maturity above 30 days	<u>Retail deposits</u> Per LAR Guideline, Chapter 2, paragraph 63, OSFI requires that if an institution allows a depositor to withdraw such deposits without applying the corresponding penalty, or despite a clause that says the depositor has no legal right to withdraw, the entire category of these funds would then have to be treated as demand deposits. OSFI outlines, in an OSFI Notes box to this paragraph, the exceptional circumstances that would qualify as hardship (under which the exceptional term deposit could be withdrawn by the depositor without changing the treatment of the entire pool of deposits) which include pre-defined and documented situations such as death, catastrophic illness, loss of employment or bankruptcy of the depositor. <u>Wholesale deposits</u> Under LAR Guideline, Chapter 2, paragraph 66, OSFI clarifies that the wholesale funding included in the LCR is defined as all funding that is callable within a 30-day horizon or that has its earliest possible contractual maturity date situated within this

		horizon (such as maturing term deposits and unsecured debt securities) as well as funding with an undetermined maturity. Further, all funding with options that are exercisable at the investor's discretion within the 30-day horizon should be included. Alternatively, for funding with options exercisable at the institution's discretion, OSFI will take into account reputational factors that may limit an institution's ability not to exercise the option. For example, where the market expects certain liabilities to be redeemed before their legal final maturity date, this behaviour should be assumed for the purpose of the LCR and these liabilities should be included as outflows.
90–91	Definition of small business customers	LAR Guideline, Chapter 2, paragraph 69 notes that unsecured wholesale funding provided by small business customers is treated the same way as retail deposits (ie distinguishing between a "stable" portion of funding and different buckets of less stable funding). Further the same bucket definitions and associated run-off factors apply as for retail deposits. The term "small business customer" is defined in line with the definition of loans extended to small businesses (in paragraph 231 of the Basel II framework) that are managed as retail exposures and are generally considered as having similar liquidity risk characteristics to retail accounts, provided that the total aggregated funding raised from one small business customer is less than CAD 1.5 million (on a consolidated basis where applicable). However, where an institution does not have any exposure to a small business customer that would enable it to use the definition under paragraph 231 of the Basel II Framework, the institution may include such a deposit in this category provided that the total aggregate funding raised from the customer is less than CAD 1.5 million (on a consolidated basis where applicable) and the deposit is managed as a retail deposit. This means that the institution treats such deposits in its internal risk management systems consistently over time and in the same manner as other retail deposits, and that the deposits are not individually managed in a way comparable to larger corporate deposits.
94–103	Deposits subject to "operational" relationships	LAR Guideline, Chapter 2, paragraphs 73–84 specify the requirements necessary to be met for an institution to use the 25% run-off rate assigned to operational deposits. Operational deposits must satisfy the qualifying activity criteria (Chapter 2, paragraphs 74 and 75) and be related to clearing, custody or cash management activities (as defined in Chapter 2, paragraphs 81–83). Further, only that part of the deposit balance with the service provider that is proven to serve a customer's operational needs can qualify as stable. Any excess balances that could be withdrawn and would still leave enough funds to fulfil the clearing, custody and cash management activities would not qualify for the 25% outflow factor. In practice, OSFI does not assess or approve banks' operational deposit categorisation ex ante. However, it does monitor usage of this category through ongoing supervisory review work and can require institutions to change their methodologies for categorising such deposits. If OSFI determines that a deficiency exists in an institution's operational deposit categorisation and the related rules text, OSFI will require the institution to take actions to remediate the issue(s), which could include categorising these deposits as non-operational until the issue(s) has been sufficiently addressed. OSFI has taken such actions based on previous reviews.
131f	Definition of other financial institutions and other legal entities	For outflow purposes, OSFI defines "other financial institutions" to include securities firms, insurance companies, fiduciaries[1] and beneficiaries.[2] For outflow purposes, OSFI defines "other legal entities" to include special purpose entities (SPEs), conduits and special purpose vehicles (SPVs) and other entities that are not included under a separately defined categorisation.

[1] Fiduciary is defined in this context as a legal entity that is authorised to manage assets on behalf of a third party. Fiduciaries include asset management entities such as pension funds and other collective investment vehicles. [2] Beneficiary is defined in this context as a legal entity that receives, or may become eligible to receive, benefits under a will, insurance policy, retirement plan, annuity, trust or other contract.

Source: OSFI Liquidity Adequacy Requirements (LAR) Guideline, Chapter 2.

Elements left to national discretion (non-exhaustive list)

Table A.9

Basel paragraph	Description	Implementation by OSFI
5	Parameters with elements of national discretion should be transparent to provide clarity both within the jurisdiction and internationally.	Items related to national discretion are articulated in OSFI Notes boxes through the LAR Guideline, which is publically available on OSFI's website.
8	Use of phase-in options	In implementing the LCR as a minimum standard in 2015, OSFI did not permit Canadian institutions to follow the transitional phase-in arrangement proposed by the Basel Committee. Instead, the minimum LCR requirement for Canadian institutions was set at 100% from 1 January 2015.
11	Supervisory guidance on HQLA usability; implementation schedule for countries receiving financial support for macroeconomic and structural reform purposes	OSFI's LAR Guideline (Chapter 2, paragraphs 5 and 6) reiterate that Canadian institutions may use their stock of HQLA, thereby falling below the 100% minimum requirement, during periods of stress. Further, the guidance allows for differentiated responses by OSFI to a reported LCR below 100%, which are proportionate with the drivers, magnitude, duration and frequency of the reported shortfall. Moreover, at a minimum, an institution should present an assessment of its liquidity position, including the factors that contributed to its LCR falling below 100%, the remedial measures that have been and will be taken and how long the situation is expected to last. Canada is not receiving financial support for macroeconomic and structural reforms.
50b	Eligibility of central bank reserves	All central bank reserves held at the Bank of Canada are eligible as Level 1 assets.
50c	Marketable securities that are assigned a 0% risk weight under the Basel II standardised approach for credit risk	Government of Canada bonds are currently eligible Level 1 assets under this provision, given that they are currently assigned a 0% risk weight under the Basel II Standardised Approach for credit risk. OSFI also clarifies in the LAR Guideline (in an OSFI Notes box to Chapter 2, paragraph 43(c)) that claims on all provincial and territorial governments and agents of the federal, provincial or territorial government whose debts are, by virtue of their enabling legislation, obligations of the parent government, receive the same risk weight as the Government of Canada (0% risk weight) under the Basel II Standardised Approach for credit risk. Also noted in this OSFI Notes box is that securities issued under the NHA MBS programme may be included as Level 1 assets.
53–54	Eligible Level 2B assets	OSFI has included the category of Level 2B assets as stated in the Basel LCR standard, with the exception of restricted contractual committed liquidity facilities. For eligibility as Level 2B assets, Canadian non-financial equities must be constituents of the S&P/TSX 60 Index. OSFI permits institutions to include eligible foreign non-financial equities as Level 2B assets in jurisdictions where (i) liquidity risk is being taken by the institution, and (ii) the common equity shares are a constituent of the major stock index(es) as determined by the prudential supervisor in that jurisdiction. Regarding the eligibility of RMBS, Canadian authorities have not prescribed specific "risk retention" regulations. However, enhanced disclosure and the requirement to deduct first loss in securitisations are examples where the principles of risk retention are met in Canada. For holdings of RMBS from foreign jurisdictions, institutions should follow the respective "risk retention" regulations in that jurisdiction.
54a	Restricted-use committed liquidity facilities	Not applicable
68	Treatment of Shariah-compliant banks	Not applicable

78	Treatment of deposit insurance	Jurisdictions may apply a 3% run-off rate to stable retail deposits if (a) they meet, in addition, to the general criteria for stable deposits, certain criteria with respect to the deposit insurance scheme; and (b) the jurisdiction has evidence of run-off rates below 3% in times of stress. OSFI has assessed that the Canadian deposit insurance scheme as administered by the CDIC satisfies the Basel criteria. OSFI also reviewed quantitative data to inform its view that the 3% run-off rate would have been sufficient in recent crisis episodes. In particular, OSFI reviewed month-on-month changes in retail demand deposits between 2007 and 2009. During this period, deposits at the D-SIBs increased significantly in aggregate, likely due to depositors considering cash deposits at large banks as relatively safe in comparison to other financial counterparties and asset classes. For individual D-SIBs, run-off rates for individual months almost never exceeded 3% based on the data available (which included uninsured deposits that would not be recognised in the current LCR category of stable deposits). OSFI also reviewed information available on deposit run-offs around the time of two regional Canadian bank failures in the 1980s, which demonstrated a similar outcome (although based on less granular data). In addition, OSFI permits institutions to recognise the 3% run-off rate for retail deposits located outside Canada that meet the stable deposit criteria in Basel LCR paragraph 75 that are fully insured by a deposit insurer which meets the criteria outlined in paragraph 78 as approved by the relevant prudential supervisor in that jurisdiction.
79f	Categories and run-off rates for less stable deposits	Jurisdictions are expected to develop additional buckets with higher run-off rates as necessary, with a minimum run-off rate of 10%. In the LAR Guideline (in an OSFI Notes box to Chapter 2, paragraph 59), OSFI clarifies that a run-off rate of 10% should be applied to all retail deposits sourced from an unaffiliated third party (ie an entity that is not branded with the institution or that is not branded as a subsidiary of the institution) that are denominated in a foreign currency (ie deposits denominated in any other currency than the domestic currency in a jurisdiction in which the institution operates), or are of high value (ie are not fully covered by an effective deposit insurance scheme or sovereign deposit guarantee). Further, all retail deposits that do not meet the criteria for stable deposits should be assigned a 10% run-off rate. This also includes deposits received from intermediaries (such as funds or trusts) where the underlying customers are retail or small business customers, provided that the following conditions are met: (i) the deposit balances are controlled solely by the underlying customer – ie the intermediary does not influence the balances placed or the institution where such balances are placed at (eg after initial placement by shopping for yield each month); and (ii) the intermediary regularly provides the institution with detailed information such that the institution can identify the list of beneficiaries' names and related deposit amounts. OSFI's decision to use a 10% run-off rate was based on reviewing month-on-month run-off rates for different categories of deposits between 2007 and 2009. For example, the maximum month-on-month change for foreign currency deposits in the D-SIBs during that period was around 6% at the aggregate level and did not exceed 8.5% at an individual D-SIB. OSFI does not consider that any additional buckets of less stable deposits with run-off rates higher than 10% are necessary.
123	Market valuation changes on derivative transactions	OSFI requires that institutions use the 24-month historical look-back approach for determining market valuation changes related to derivative transactions (Chapter 2, paragraph 103), in line with the approach incorporated in the Basel LCR standard.

134–140	Run-off rates for other contingent funding liabilities	OSFI sets the following outflow rates for other contingent funding liabilities (Chapter 2, paragraphs 114–120): • 100% for non-contractual contingent funding obligations related to potential liquidity drawdowns from joint ventures or minority investments in unconsolidated entities where there is the expectation that the institution will be the main liquidity provider when the entity is in need of liquidity (although the amount to be multiplied by the 100% rate will be determined after OSFI's assessment of the institution's methodology related to such non-contractual contingent funding obligations, considering factors such as the nature of the exposure and the likelihood of drawdown); • 3% for trade-related obligations directly underpinned by the movement of goods or the provision of services, such as documentary trade letters of credit, documentary and clean collection, import bills and export bills; and guarantees directly related to trade finance obligations, such as shipping guarantees; • 5% for guarantees and letters of credit unrelated to trade finance obligations; • 2% for unconditionally revocable credit and liquidity facilities provided to retail and small business customers; • 5% for unconditionally revocable credit and liquidity facilities provided to all other customers; • 0% for non-contractual obligations related to potential requests for debt repurchases of the institution's own debt or that of related conduits, securities investment vehicles and other such financing facilities; • 5% for non-contractual obligations related to structured products where customers anticipate ready marketability, such as adjustable rate notes and variable rate demand notes; • 0% for non-contractual obligations related to managed funds that are marketed with the objective of maintaining a stable value such as money market mutual funds or other types of stable value collective investment funds; • 0% for issuers with an affiliated dealer or market maker for non-contractual obligations related to the need to potentially repurchase outstanding debt securities (unsecured and secured, term as well as short-term) having maturities greater than 30 calendar days; and • 50% for non-contractual obligations where customer short positions are covered by other customers' collateral.
160	Other contractual inflows	OSFI has assigned a 100% weight to other contractual inflows.
164–165	Scope of application of LCR and scope of consolidation of entities within a banking group	The LCR requirements are applicable to internationally active deposit-taking institutions in Canada on a consolidated basis. In addition, OSFI applies the LCR requirements on a sub-consolidated basis where Canadian internationally active deposit-taking institutions have Canadian subsidiaries that are themselves federally regulated deposit-taking institutions under OSFI's purview.
168–170	Differences in home/host liquidity requirements	When calculating the LCR on a consolidated basis, a cross-border deposit-taking group should apply the liquidity parameters adopted in the home jurisdiction to all legal entities being consolidated except for the treatment of retail/small business deposits that should follow the relevant parameters adopted in host jurisdictions in which the entities (branch or subsidiary) operate (Chapter 2, paragraph 145). Home requirements for retail and small business deposits should apply to all the legal entities (including branches of the bank) operating in host jurisdictions if (i) the host jurisdiction has no requirements for retail and small business deposits; (ii) the host jurisdiction has not implemented the LCR; or (iii) the home requirements are stricter than the host requirements (Chapter 2, paragraph 145).

Source: OSFI.