



PRUDENTIAL STANDARDS
Liquidity Principles

SASKCENTRAL COMMUNICATION NUMBER
Prudential Standard 2017-07

ISSUE DATE JANUARY 2017	REVISION DATE JANUARY 2021
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A. INTRODUCTION

Pursuant to Part XIII of *The Credit Union Central of Saskatchewan Act, 2016* (the Act), Credit Union Deposit Guarantee Corporation (the Corporation) may make Prudential Standards that apply to SaskCentral. The Prudential Standard (Standard) contained herein must be adhered to by SaskCentral.

This Standard sets out prudential considerations relating to the liquidity risk management program of SaskCentral.

Pursuant to section 14-1 of the Act, SaskCentral is to maintain adequate and appropriate forms of liquidity. The liquidity principles set out in this Standard provide the framework within which the Corporation assesses the content and effectiveness of SaskCentral's liquidity risk management, and whether the risk management program is producing adequate and appropriate forms of liquidity. Notwithstanding that SaskCentral may meet these standards, the Corporation may direct SaskCentral to take actions to provide additional liquidity in the forms and amounts that the Corporation may require under subsection 14-2(1)(b) of the Act.

Liquidity refers to the capacity of an institution to generate or obtain sufficient cash or its equivalent in a timely manner at a reasonable price to meet its commitments as they fall due and to fund new business opportunities as part of going-concern operations. Liquidity risk is the potential for losses to be incurred from holding insufficient liquidity to survive a contingent stress event, whether name-specific or market-wide in origin. This Standard describes some of the elements that will be considered by the Corporation in assessing the strength of SaskCentral's liquidity risk management framework and describes some of the information that will be used to assess liquidity adequacy as appropriate to the scale, complexity and function of SaskCentral.

B. ROLE AND UNIQUENESS OF SASKCENTRAL

A unique characteristic of the Saskatchewan credit union system is credit unions' considerable reliance on SaskCentral to manage their liquidity. In its role as statutory liquidity manager, SaskCentral is responsible to manage a substantial portion of credit unions' liquidity and also support the management of liquidity risk.

Pursuant to section 18(1) of *The Credit Union Regulations, 1999*, SaskCentral prescribes the statutory liquidity requirement for Saskatchewan credit unions. These funds are held on deposit with SaskCentral, aggregated, and are used primarily to:

- ensure the clearing and settlement of payment obligations within the provincial credit union system;
- support daily cash flow management; and
- support emergency liquidity events.

SaskCentral is expected to maintain a sufficient stock of liquid assets that is available to meet operating requirements and unexpected contingencies. The amount of liquidity that SaskCentral targets is to be determined by its application of the liquidity principles.

The Corporation's expectations for Saskatchewan credit unions' liquidity management practices are found in the Standards of Sound Business Practice - Liquidity Adequacy Requirements (Liquidity Standards) and the Liquidity Risk Management Regulatory

Guideline. The Liquidity Standards contains the methodology underpinning the quantitative standards and liquidity metrics used by the Corporation to assess the liquidity adequacy of credit unions. As the statutory liquidity manager, SaskCentral should consider the expectations that the Corporation has for credit unions in developing its own liquidity risk management practices.

C. FUNDAMENTAL PRINCIPLE

The Corporation expects SaskCentral to maintain the infrastructure and risk management control function capacity to identify, measure, manage and monitor liquidity risk exposures under hypothetical stressed outcomes and maintain structurally sound funding and liquidity profiles. This expectation is in line with the fundamental principle for the management of liquidity risk noted below.

Principle #1: *SaskCentral is responsible for the sound management of liquidity risk. SaskCentral should establish a robust liquidity risk management framework that ensures it maintains sufficient liquidity, including a cushion of unencumbered, high quality liquid assets, to withstand a range of stress events, including those involving the loss or impairment of both unsecured and secured funding sources.*

In particular, the Corporation expects SaskCentral 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 programs;
- a funding strategy that assures diversification of funding sources across several dimensions such as products, tenors, legal entities and business lines; and
- arrangements for public disclosure of liquidity positions, risks and the commensurate risk management practices undertaken.

These practices include, and are to be supported by, sufficient interaction and planning with credit unions.

SaskCentral should use appropriately conservative assumptions with respect to the marketability of assets and access to funding (both secured and unsecured) during periods of stress. Moreover, it should not allow external pressures to compromise the integrity of its liquidity risk management, control functions, limit systems and liquidity cushion.

D. GOVERNANCE, RISK TOLERANCE AND LIQUIDITY POLICIES

Please refer to the *Corporate Governance Regulatory Guideline and Prudential Standard* for additional guidance regarding the Corporation's expectation of boards of directors and senior management.

Principle #2: *SaskCentral should clearly articulate a liquidity risk tolerance that is appropriate for its business strategy and its role in the financial system.*

The board of directors is responsible for the determination of SaskCentral's liquidity risk tolerance. The liquidity risk tolerance, which should define the level of liquidity risk that SaskCentral is willing to assume, should ensure that SaskCentral prudently manages its liquidity in normal times such that it is able to withstand a prolonged period of stress. The risk tolerance should be articulated in such a way that all levels of management clearly understand the trade-off between risks and profits. The Corporation recognizes that there are many ways – both qualitative and quantitative – in which SaskCentral can express its liquidity risk tolerance and, as such, will assess the appropriateness of the risk tolerance framework in light of its business strategy and role in the financial system.

Principle #3: *Senior management should develop a strategy, policies and practices to manage liquidity risk in accordance with the risk tolerance and to ensure that SaskCentral maintains sufficient liquidity. Senior management should continuously review information on its liquidity developments and report to the board of directors on a regular basis. SaskCentral's Board of Directors should review and approve the strategy, policies and practices related to the management of liquidity at least annually and ensure that senior management manages liquidity risk effectively.*

The stated liquidity risk tolerance should be consistent with the size, sophistication, business objectives, relevant funding markets and overall risk appetite of the institution. Further, it should represent a baseline for operationalizing SaskCentral's liquidity strategies, policies, risk management and control functions. 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 organization.

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. SaskCentral'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 organization. In particular, these policies should capture decisions around:

- asset, liability and off-balance sheet instrument composition;
- funding source diversification;
- quantitative regulatory minimums;
- 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;
- inter-jurisdictional risks and impacts to provincial system liquidity from participation in group clearing arrangements;
- contingency funding plans;
- management of collateral including pledging¹ and apportionment; and
- limit setting, the process for escalating exceptions and review of applicability.

¹ See the Corporation's *Pledging Prudential Standard*.

Attention by the Corporation will be paid to assessing the appropriateness and suitability of these policies in the context of SaskCentral's stated liquidity risk tolerance. That assessment will also rely on reports by management to relevant committees along with any independent reviews of SaskCentral's compliance with board-approved policies and controls, as conducted by either internal or external audit processes.

Senior management should ensure that SaskCentral has adequate internal controls and clearly identifies positions responsible for managing liquidity risk. To avoid potential conflicts of interest, senior management should strive for adequate separation of responsibilities in key elements of its risk management processes. SaskCentral should have liquidity risk identification, measurement, monitoring and control functions with clearly defined responsibilities. The Chief Risk Officer (CRO) or the equivalent² independent risk management function (i.e. the second line of defence³) should provide sufficient independent oversight of the first line of defence.

As appropriate, SaskCentral should establish a committee or designate a cross-functional group to oversee liquidity and funding risk management. These individuals will be responsible for managing and vetting the strategic direction of liquidity and funding risk (such as positions and policies) within SaskCentral. The risk management function should retain its challenge function and maintain independence. To the extent that specific risk management personnel take on this role of overseer, they are expected to be impartial under normal operating conditions and thus should not actively participate in decision making regarding liquidity and funding risk position taking on a day-to-day basis. In cases where the contingency funding plan (CFP) is the primary liquidity crisis management instrument, risk management should have the ability to invoke the CFP as necessary.

Principle #4: *SaskCentral should actively monitor and control liquidity risk exposures and funding needs, taking into account legal, regulatory and operational limitations to the transferability of liquidity.*

SaskCentral has a unique role as a liquidity manager in the Saskatchewan credit union system, and potential exposure to inter-jurisdictional liquidity risk through participation in a group clearing arrangement. As such, to actively monitor and control liquidity risk exposures and funding needs, SaskCentral should:

- actively monitor credit unions' daily liquidity positions (e.g., current accounts and lines of credit) in relation to established policy limits;
- assess liquidity risk on a system-wide basis and consult with credit unions to determine their potential funding needs in an emergency event;
- ensure effective processes are in place to allocate and transfer liquidity within the system, and meet collateral requirements for clearing and settlement;
- engage with members of the group clearing arrangement to understand the degree of inter-jurisdictional liquidity risk;
- undertake stress-testing to assist in identifying, measuring and controlling liquidity risk;
- assess liquidity sufficiency with consideration to organization-specific and system-wide stress tests;
- assess liquidity availability with consideration to fundamental, market-related and operational characteristics of SaskCentral's stock of liquid assets; and

² The CRO role can be held by another executive of SaskCentral (i.e., the executive has dual roles). In this case, the dual role must not compromise the independence required of the CRO. Refer to the *Corporate Governance Guideline and Prudential Standard* for details.

³ Refer to the *Operational Risk Management Prudential Standard*, which outlines a three lines of defence model.

- ensure appropriate policy limits, sufficient and available liquidity, and multiple sources of funding to mitigate stressed events.

Effective communication with credit unions and other stakeholders when liquidity problems arise is of vital importance. SaskCentral is expected to be actively engaged with credit unions and have appropriate communication plans and procedures documented in advance.

Assumptions regarding the transferability of funds and collateral should be transparent in liquidity risk management plans. SaskCentral should fully consider regulatory, legal, accounting, credit, tax and internal constraints on the movement of liquidity and collateral. SaskCentral should also consider the operational arrangements needed to transfer funds and collateral and the time required to complete such transfers. Where applicable, SaskCentral is responsible for providing due diligence to the Corporation on the soundness of these arrangements.

E. MEASURING, MANAGING AND MONITORING LIQUIDITY

Principle #5: *SaskCentral should have a sound process for identifying, measuring, monitoring and controlling liquidity risk. This process should include a robust framework for comprehensively projecting cash flows arising from assets, liabilities and off-balance sheet items over an appropriate set of time horizons.*

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 program that is integrated within the liquidity management strategy and contingency funding plans of SaskCentral. Components of such a program should include the combination of:
 - a process for measuring and reporting pro-forma funding requirements through the projection of contractual and contingent cash flows;
 - the capability to generate projected cash flows over a sufficiently long period of time. The projections should be updated periodically, and the underlying assumptions should be revised as needed;
 - the ability to monitor liquidity – both on a subsidiary basis and on an aggregate group basis; and
 - maintenance of a stock of high-quality unencumbered liquid assets that can be converted under stress conditions into cash inflows without incurring undue losses;
- 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:
 - internal limit setting and controls consistent with SaskCentral’s articulated risk tolerance;
 - risk-taking incentives of individual business lines to ensure they are aligned with the liquidity risk exposures, whether structural or contingent, they create for SaskCentral; and
 - managing access to a diversified set of funding sources and tenors;
- 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; and
- the ability to aggregate risk data in a way that is accurate and reliable under normal and stress conditions. Where SaskCentral relies on manual processes and desktop

applications (e.g., spreadsheets, databases), it should have effective controls in place to ensure the data is reliable.

F. STRESS TESTING⁴

Principle #6: *SaskCentral should conduct stress tests on a regular basis for a variety of institution-specific and market-wide stress scenarios (individually and in combination) to identify sources of potential liquidity strain and to ensure that current exposures remain in accordance with its established liquidity risk tolerance. SaskCentral should use stress test outcomes to adjust its liquidity risk management strategies, policies, and positions and to develop effective contingency plans.*

The Corporation expects SaskCentral to develop a comprehensive liquidity stress testing program that considers multiple scenarios of varying degrees of stress. SaskCentral should rely on forward looking measures of prospective liquidity for the determination of funding requirements under stress. Evaluating whether SaskCentral has sufficient liquidity depends greatly on the behaviour of cash flows under different conditions; however, the supervisory assessment of an effective stress testing program will focus on SaskCentral's design of extreme but plausible scenarios that capture elements of the following, where materially relevant to SaskCentral:

- name-specific events (for example, those based around events causing the loss of wholesale funding access, inability to draw on commitments from other entities, need to pledge additional collateral due to a multi-notch downgrade, requirement to repurchase securitized assets, and/or honour non-contractual obligations to mitigate reputational risk);
- market-wide disruptions (for example, those based around events that might cause a mass flight to quality assets or a re-pricing of market or investor risk appetite); and
- combinations of the above items.

In designing stress scenarios, SaskCentral should explore stressors based on severe but plausible events that may differ from historical experience at SaskCentral or from that observed in the market. The degree of sophistication of liquidity and funding risk modelling should be commensurate with the degree of risk inherent in SaskCentral.

The outcomes of such stress test exercises should be compared against the stated risk tolerance of SaskCentral; integrated into management decisions including limit setting; and affect the design of contingency funding plans, including the determination of action plans to deal with events of liquidity stress allowing for the rapid escalation of information and implementation of a coordinated tactical response by SaskCentral to the liquidity stress. Senior management should decide how to incorporate the results of the stress tests in assessing and planning for potential liquidity shortfalls in SaskCentral's contingency funding plan. To the extent that projected funding deficits are larger than implied by SaskCentral's liquidity risk tolerance, senior management should consider whether to adjust its liquidity position or to bolster its contingency plan.

A common objective among all liquidity stress tests is the assessment of impact caused by the realization of contingent liquidity risks embedded in SaskCentral's balance sheet and funding profile. Such assessments should consider both contractual and legal requirements to meet unexpected funding obligations. In addition, it is critical that SaskCentral utilize

⁴ In addition to the guidance offered in this section, SaskCentral is expected to comply with the requirements outlined in the Corporation's *Stress Testing Prudential Standard*.

stress testing to assess the reputation impact that failing to meet non-contractual and revocable liquidity obligations would represent.

Assessing the severity of estimated funding gaps or shortfalls and appropriate management response requires SaskCentral to further consider, among other things, the:

- size and timing of the gap relative to total funding;
- current level of actual stress (whether name-specific or market-wide) relative to the modelled level of stress;
- diversity of funding sources available to meet that shortfall; and
- size of the stock of high-quality, unencumbered liquid assets relative to the gap.

Results from scenario tests should be reported to senior management at least quarterly and, as appropriate, be subject to board of directors and/or committee review.

BEHAVIOURAL ASSUMPTIONS UNDER STRESS

Unlike other risk models that rely on recent historical data, contingent cash flows arising under stress are often low probability events with potentially large funding implications. Consequently, an extra degree of conservatism should be applied to the design of these assumptions (e.g., assigning later dates to cash inflows and earlier dates to cash outflows when uncertainty exists or other assumptions).

For each secured and unsecured funding source, SaskCentral should make behavioural assumptions about whether each liability with an arriving contractual maturity would need to be repaid or would be partially or fully rolled over. For liabilities without contractual maturities or having embedded options that would reduce the effective term, SaskCentral should design a schedule for run-off assumptions over the relevant stress horizon. To the extent SaskCentral relies on secured funding, assumptions should be made about capacity for the funding market to continue to roll over in an environment where SaskCentral's creditworthiness may be in question.

With regard to inflows to SaskCentral, behavioural assumptions should be consistent with SaskCentral's assessment of internal contingent decisions towards reducing, maintaining or increasing business line activity as part of normal course of business under a relevant contingency funding plan.

For off-balance sheet instruments subject to contingent liquidity risks, additional behavioural assumptions are critical and should be unique to a particular business funding model. Other contingent funding obligations that might arise under stress that should be considered include but are not limited to:

- the funding impact of a multi-notch rating downgrade on collateral requirements;
- irrevocable and revocable credit lines to other legal entities or persons;
- potential funding obligations arising from issued bankers' acceptances, other guarantees and trade finance; and
- possible implications of market volatility or credit deterioration impact on margining agreements.

Stock of Liquid Assets

Principle #7: *SaskCentral should maintain a cushion of unencumbered, high quality liquid assets to be held as insurance against a range of liquidity stress scenarios, including those that involve the loss or impairment of unsecured and typically available secured funding sources. There should be no legal, regulatory or operational impediment to using these assets to obtain funding.*

To satisfy potential funding gaps, SaskCentral should maintain a diverse stock of high quality, unencumbered assets that are liquid (e.g., 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). 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.

Adequacy of the Stock of Liquid Assets

The purpose of this stock of liquid assets is to provide SaskCentral with a source of available funds to meet normal and contingent cash flow needs as determined from stress testing outcomes so that it has the necessary time to:

- access alternative sources of funding, upon initiation of a contingency funding plan, provided circumstances giving rise to a liquidity problem are temporary; and
- survive a name-specific and/or market-wide liquidity stress event until other longer term measures or solutions can take effect.

Demonstration of counterbalancing capacity (e.g., the ability to raise unsecured funds, draw on commitments, call loans or access new secured funding sources in the short term) will not be considered a sufficient substitute to the maintenance of an adequate stock of liquid assets.

Factors to consider when determining how appropriate the stock of liquid assets is relative to SaskCentral's liquidity risk profile include:

- the stability of funding sources;
- the cost and diversity of funding;
- short-term funding requirements;
- contingent funding needs; and
- the degree of integration of liquidity management with Saskatchewan credit unions.

The liquidity policies of SaskCentral, therefore, should clearly define the role of the stock of liquid assets within the overall liquidity management system (including a methodology for classifying, ranking and adjusting the liquidity value of assets) and establish minimum targets for holdings of liquid assets.

Liquidity Value

Part of the consideration in determining the adequacy of the stock of liquid assets is the assignment of liquidity values to particular asset classes. Such values represent an assessment of the possible discounts that may be faced in selling down or borrowing against

the stock of liquid assets to meet a funding shortfall. Such an assessment should reflect the period of stress. Liquidity values should be more conservative than, for instance, the more generalized haircuts associated with collateral pledged to meet margining requirements. Liquidity values should be re-assessed by senior management annually and reported to the board of directors, as necessary, as part of the normal review process of the appropriateness of SaskCentral's stress testing program. However, a process should exist to revisit and update liquidity values with greater frequency in periods of market-wide stress.

Factors to consider when determining liquidity values or haircuts (e.g., dollar and time value to the haircut) given SaskCentral's liquidity risk profile include:

- the quality of the asset – instruments that tend to be more easily liquefiable or repoable during many forms of stress scenarios are likely candidates. Often, there is a link between credit quality of the reference asset and its marketability;
- the structure of the market for the asset – an active number of market participants with transparent price discovery enhances the potential liquidity value of an asset;
- diversity within the stock of liquid assets – capacity to liquidate or repo particular assets can vary depending on the scenario for reasons outside of SaskCentral's control. Concentration in the stock of liquid assets should result in lower liquidity values. This is even more of an issue if the assets need to be liquidated in a narrow market; and
- the presence of any legal or practical encumbrance to the sale or borrowing against the asset.

Encumbrance

Principle #8: *SaskCentral should actively manage its collateral positions, differentiating between encumbered and unencumbered assets. SaskCentral should monitor the legal entity and physical location where collateral is held and how it may be mobilised in a timely manner.*

When determining which assets can be included in a stock of liquid assets (including clearly assigning a liquidity value to each), SaskCentral's policies should also consider the existence of encumbrances that would prevent a quick sale to meet unanticipated net cash outflow requirements. This means, for example, that assets normally pledged to secure specific obligations – like advances to settle payments in a large value payment system, overnight advances from a central bank, or margin requirements on an exchange, central counterparty or bilateral margining agreement – should not be considered part of the stock of liquid assets available to meet unexpected net cash outflows. However, assets that have been pre-positioned or deposited with, or pledged to, the central bank but have not been used to generate liquidity may be included in the stock of liquid assets available to meet unexpected net cash outflows. Re-assessments of actual encumbrance and the potential for assets making up the stock to become encumbered (for instance, the impact of a ratings trigger on collateral demands arising from some bilateral derivatives counterparty netting agreement or an exchange margining requirement) should also be conducted. If such assessments cannot be conducted, SaskCentral should hold a larger stock of liquid assets or impose lower liquidity values to compensate for uncertainty of encumbrance.

The Corporation expects SaskCentral to comply with internal policies on the pledging of assets⁵. SaskCentral should actively monitor its pledging and apportionment of assets to clearing and settlement organizations as part of its ongoing liquidity management program.

⁵ Refer to the Corporation's *Pledging Prudential Standard*.

Other Measures

Cash flow measures (generally) are the basis for identifying funding mismatches. SaskCentral should also understand any potential concentrations in wholesale funding (e.g., reliance on any single entity or group and the implications if that entity/group removed its funding).

SaskCentral should not rely on one individual measure or stress scenario. It should first and foremost select measures of liquidity risk in a manner that is consistent with its overall business model, risk tolerance and risk management strategy. It is on that basis that the Corporation will assess SaskCentral's capacity to measure liquidity risk.

G. CONTINGENCY PLANNING

Principle #9: *SaskCentral should have a formal contingency funding plan (CFP) that clearly sets out the strategies for addressing liquidity shortfalls in emergency situations. A CFP should outline policies to manage a range of stress environments, establish clear lines of responsibility, include clear invocation and escalation procedures and be regularly tested and updated to ensure that it is operationally robust.*

SaskCentral's ability to withstand liquidity disruptions (whether name-specific or market-wide) can depend on the calibre of its formal contingency plans. A contingency funding plan (CFP) represents an institution's strategy for handling a variety of prospective liquidity stress events with the goal of maintaining market confidence and financial stability. Effective CFPs should consist of several components:

- a set of quantitative and qualitative early warning indicators (EWI), designed with the aid of stress test results that identify the emergence of increased risk or vulnerabilities to an institution's liquidity risk position or potential funding needs. EWIs should include triggers that would cause an assessment and potential response by management to mitigate SaskCentral's exposure to the emerging risk and, if necessary, initialize a formal application of the CFP. The responsibility for monitoring EWIs should be clearly assigned and the frequency of monitoring and the escalation process should be defined, documented and commensurate with the speed at which a degradation of the EWI may signal a deterioration of SaskCentral's liquidity position. EWIs and triggers should be reviewed and discussed with senior management regularly to ensure they remain relevant. Examples of EWIs may include, but are not limited to:
 - rapid asset growth, especially when funded with less stable sources of funding;
 - growing concentration in assets or liabilities;
 - repeated incidents of positions approaching or breaching internal or regulatory limits;
 - deterioration of SaskCentral's financial conditions (e.g., earnings, asset quality, credit rating, increased spreads and funding costs, increased collateral requirements);
 - deterioration in market indicators that are correlated with the financial condition of SaskCentral;
 - deterioration in the financial viability of peer institutions that could make SaskCentral susceptible to contagion risk; and
 - negative publicity (including monitoring social media activities);
- a menu of options for dealing with name-specific stress events, and/or market-wide stress events at multiple horizons;
- specific procedures and reporting requirements to ensure timely and uninterrupted information flows to senior management with potential for escalation;

- clear division of roles and responsibilities within management and procedures for the stress event in question;
- a plan for altering on-balance sheet asset and liability behaviours (e.g., market assets more aggressively, sell assets that were intended to be held) and use of off-balance sheet sources, with consideration of the time to execute;
- an indication of the priority of alternative sources of funds (e.g., designating primary and secondary sources of liquidity), including an assessment of the time required to access each source of funding and any operational hurdles and a hierarchy of liquidity consuming activities;
- a mechanism to track and monitor eligible collateral to secure back up emergency liquidity facilities (either from private sources and/or the Bank of Canada);
- a classification of borrowers and sources of funding according to their importance to SaskCentral in order to maintain customer relationships; and
- plans and procedures, including key contacts, for communicating with stakeholders (e.g., creditors, shareholders, counterparties, custodians and correspondents), employees, the Corporation, the media and public.

Contingency plans should include procedures for making up cash flow shortfalls in emergency situations. The plan should spell out as clearly as possible the sources of funds SaskCentral expects to have available from various sources.

SaskCentral is required to notify the Corporation upon the initialization or de-escalation of a CFP. Further communication demands will be treated on a case-by-case basis. Beyond this, the degree of prescription, relative to flexibility, in its plans is left to SaskCentral to determine.

The development, and ongoing maintenance, of CFPs should be integrated within SaskCentral's program for stress testing liquidity risk and informed by the stress test results. In other words, potential action plans outlining the process for the escalation of the CFP can come from the output of stress tests and, further, if a scenario is designed where the CFP would need to be invoked, then assumptions should reflect this.

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. If SaskCentral is a participant in a group clearing arrangement where multiple contingency funding plans exist, it should assess the effectiveness of these plans, including coordination of actions and communication to support appropriate management of risk, including contagion risk.

H. INTERNAL CONTROLS AND INCENTIVES

The Corporation expects that SaskCentral will have systems in place such that senior management and the board of directors are able to review compliance with established liquidity risk management policies, control liquidity risk exposure and evaluate risk tolerance through the use of limits, funding targets and early warning indicators. The limit setting and compliance framework(s) should be calibrated to the results of SaskCentral's stress testing program with the goal of being able to continue operations as a going-concern. Limits should also be operationally effective and appropriately calibrated in accordance with the stated liquidity risk tolerance (e.g., not set so high that they are never triggered). Clearly articulated and documented policies should describe procedures for dealing with limit exceptions, permissions or authorization to set and change limits, notification

responsibilities and escalation procedures, sign-off by senior management and/or the board of directors and remedial follow-up and/or disciplinary actions.

In order to ensure the integrity of information reporting, the Corporation expects SaskCentral to establish a framework whereby monitoring of performance against limits is conducted by parties that are operationally independent of funding areas and other business units. Such personnel should be competently trained and have the information system capabilities to monitor whether liquidity risk remains within the bounds set by senior management and the board of directors. This framework should be subject to regular review as part of the general internal audit process.

In instances where SaskCentral coordinates with other jurisdictions or entities to access the payments system, appropriate controls must be in place to manage the risks that may be imposed on SaskCentral by other participants.

I. MANAGING MARKET ACCESS

Principle #10: *SaskCentral should establish a funding strategy that provides effective diversification in the sources and tenor of funding. It should maintain an ongoing presence in its chosen funding markets and strong relationships with funds providers to promote effective diversification of funding sources. SaskCentral should regularly gauge its capacity to raise funds quickly from each source. It should identify the main factors that affect its ability to raise funds and monitor those factors closely to ensure that estimates of fund raising capacity remain valid.*

Careful design of diversification strategies among funding sources should improve the capacity of SaskCentral to survive a variety of name-specific and market-wide stress scenarios, even beyond necessarily what a best practice stress testing program can identify. Such a design should be complemented with rigorous limit setting practices, where deemed appropriate, since breaches can represent a good indicator of emerging funding gaps. Building strong relationships with providers of funding outside of SaskCentral's corporate group can provide a line of defence in liquidity management. The frequency of contact and the frequency of use of a funding source are two possible indicators of the strength of a funding relationship and hence its reliability.

The Corporation expects SaskCentral to periodically review its efforts to maintain the diversification of its funding sources, to establish relationships with funding sources 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. As a check for adequate diversification of funding, SaskCentral needs to examine the level of reliance on individual funding sources by instrument type, tenor, provider of funds, currency and geographic market and set internal limits on the maximum amount of funds it will accept in the normal course from any one counterparty or any one funding market (e.g., asset backed commercial paper). Further, SaskCentral should identify potential correlations between similar funding sources or markets for funding concentrations under stress.

Developing markets for asset sales or exploring arrangements under which SaskCentral can borrow against assets is another element of managing market access. The frequency of use of some asset-sales markets is a possible indicator of SaskCentral's ability to execute sales under adverse scenarios. SaskCentral should not assume that new funding arrangements

around asset sales will exist under periods of stress for which it has not maintained a history of repeated access.

J. PUBLIC DISCLOSURE

Principle #11: *SaskCentral should publicly disclose information on a regular basis that enables market participants to make an informed judgement about the soundness of its liquidity risk management framework and liquidity position.*

SaskCentral should disclose sufficient information regarding its management of liquidity risk to enable relevant stakeholders to make an informed judgement about the ability of the institution to meet its liquidity needs. This information could include:

- the organizational structure and framework around the management of liquidity risk;
- the roles and responsibilities of the board of directors, senior management and delegated committees in the design and operation of that framework;
- an articulation of liquidity risk tolerance and a demonstration of how compliance with that tolerance is assessed;
- the inclusion of quantitative measures such as the composition and size of the stock of liquid assets and a description of the assumptions employed;
- a description of limit setting practices; and
- an overview of stress tests used.