

# **CREDIT SUPPORT ANNEX**

to the Schedule to the

## Amended and Restated Interest Rate 2002 Master Agreement

dated as of August 1, 2014

between

Royal Bank of Canada ("Party A") and RBC Covered Bond Guarantor Limited Partnership ("Party B")

This Annex supplements, forms part of, and is subject to, the ISDA Master Agreement referred to above and is part of its Schedule. For the purposes of this Agreement, including, without limitation, Sections 1(c), 2(a), 5 and 6, the credit support arrangements set out in this Annex constitute a Transaction (for which this Annex constitutes the Confirmation).

## Paragraph 1. Interpretation

Capitalised terms not otherwise defined in this Annex or elsewhere in this Agreement have the meanings specified pursuant to Paragraph 10, and all references in this Annex to Paragraphs are to Paragraphs of this Annex. In the event of any inconsistency between this Annex and the other provisions of this Schedule, this Annex will prevail, and in the event of any inconsistency between Paragraph 11 and the other provisions of this Annex, Paragraph 11 will prevail. For the avoidance of doubt, references to "transfer" in this Annex mean, in relation to cash, payment, and in relation to the assets, delivery.

## Paragraph 2. Credit Support Obligations

(a) **Delivery Amount.** Subject to Paragraphs 3 and 4, upon a demand made by the Transferee on or promptly following a Valuation Date, if the Delivery Amount for that Valuation Date equals or exceeds the Transferor's Minimum Transfer Amount, then the Transferor will transfer to the Transferee Eligible Credit Support having a Value as of the date of transfer at least equal to the applicable Delivery Amount (rounded pursuant to Paragraph 11(b)(iii)(D)). Unless otherwise specified in Paragraph 11(b), the "Delivery Amount" applicable to the Transferor for any Valuation Date will equal the amount by which:

(i) the Credit Support Amount

exceeds

(ii) the Value as of that Valuation Date of the Transferor's Credit Support Balance (adjusted to include any prior Delivery Amount and to exclude any prior Return Amount, the transfer of which, in each case, has not yet been completed and for which the relevant Settlement Day falls on or after such Valuation Date).

(b) **Return Amount.** Subject to Paragraphs 3 and 4, upon a demand made by the Transferor on or promptly following a Valuation Date, if the Return Amount for that Valuation Date equals or exceeds the Transferee's Minimum Transfer Amount, then the Transferee will transfer to the Transferor Equivalent Credit Support specified by the Transferor in that demand having a Value as of the date of transfer as close as practicable to the applicable Return Amount (rounded pursuant to Paragraph 11(b)(iii)(D)) and the Credit Support Balance will, upon such

transfer, be reduced accordingly. Unless otherwise specified in Paragraph 11(b), the "Return Amount" applicable to the Transferee for any Valuation Date will equal the amount by which:

(i) the Value as of that Valuation Date of the Transferor's Credit Support Balance (adjusted to include any prior Delivery Amount and to exclude any prior Return Amount, the transfer of which, in each case, has not yet been completed and for which the relevant Settlement Day falls on or after such Valuation Date).

exceeds

(ii) the Credit Support Amount.

#### Paragraph 3. Transfers, Calculations and Exchanges

(a) *Transfers.* All transfers under this Annex of any Eligible Credit Support, Equivalent Credit Support, Interest Amount or Equivalent Distributions shall be made in accordance with the instructions of the Transferee or Transferor, as applicable, and shall be made:

(i) in the case of cash, by transfer into one or more bank accounts specified by the recipient;

(ii) in the case of certificated securities which cannot or which the parties have agreed will not be delivered by book-entry, by delivery in appropriate physical form to the recipient or its account accompanied by any duly executed instruments of transfer, transfer tax stamps and any other documents necessary to constitute a legally valid transfer of the transferring party's legal and beneficial title to the recipient; and

(iii) in the case of securities which the parties have agreed will be delivered by book-entry, by the giving of written instructions (including, for the avoidance of doubt, instructions given by telex, facsimile transmission or electronic messaging system) to the relevant depository institution or other entity specified by the recipient, together with a written copy of the instructions to the recipient, sufficient, if complied with, to result in a legally effective transfer of the transferring party's legal and beneficial title to the recipient.

Subject to Paragraph 4 and unless otherwise specified, if a demand for the transfer of Eligible Credit Support or Equivalent Credit Support is received by the Notification Time, then the relevant transfer will be made not later than the close of business on the Settlement Day relating to the date such demand is received; if a demand is received after the Notification Time, then the relevant transfer will be made not later than the close of business on the Settlement transfer will be made not later than the close of business on the Settlement transfer will be made not later than the close of business on the Settlement Day relating to the date such demand is received.

(b) *Calculations.* All calculations of Value and Exposure for purposes of Paragraphs 2 and 4(a) will be made by the relevant Valuation Agent as of the relevant Valuation Time. The Valuation Agent will notify each party (or the other party, if the Valuation Agent is a party) of its calculations not later than the Notification Time on the Local Business Day following the applicable Valuation Date (or, in the case of Paragraph 4(a), following the date of calculation).

#### (c) *Exchanges.*

(i) Unless otherwise specified in Paragraph 11, the Transferor may on any Local Business Day by notice inform the Transferee that it wishes to transfer to the Transferee Eligible Credit Support specified in that notice (the "New Credit Support") in exchange for certain Eligible Credit Support (the "Original Credit Support") specified in that notice comprised in the Transferor's Credit Support Balance.

(ii) If the Transferee notifies the Transferor that it has consented to the proposed exchange, (A) the Transferor will be obliged to transfer the New Credit Support to the Transferee on the first Settlement Day following the date on which it receives notice (which may be oral telephonic notice) from the Transferee of its consent and (B) the Transferee will be obliged to transfer to the Transferor Equivalent Credit Support in respect of the Original Credit Support not later than the Settlement Day following the date on which the Transferee receives the New Credit Support, unless otherwise specified in Paragraph 11(d) (the "Exchange Date"); *provided* that the Transferee will only be obliged to transfer Equivalent Credit Support with a Value as of the date of transfer as close as practicable to, but in any event not more than, the Value of the New Credit Support as of that date.

## Paragraph 4. Dispute Resolution

(a) *Disputed Calculations or Valuations.* If a party (a "Disputing Party") reasonably disputes (I) the Valuation Agent's calculation of a Delivery Amount or a Return Amount or (II) the Value of any transfer of Eligible Credit Support or Equivalent Credit Support, then:

(1) the Disputing Party will notify the other party and the Valuation Agent (if the Valuation Agent is not the other party) not later than the close of business on the Local Business Day following, in the case of (I) above, the date that the demand is received under Paragraph 2 or, in the case of (II) above, the date of transfer;

(2) in the case of (I) above, the appropriate party will transfer the undisputed amount to the other party not later than the close of business on the Settlement Day following the date that the demand is received under Paragraph 2;

- (3) the parties will consult with each other in an attempt to resolve the dispute; and
- (4) if they fail to resolve the dispute by the Resolution Time, then:

(i) in the case of a dispute involving a Delivery Amount or Return Amount, unless otherwise specified in Paragraph 11(c), the Valuation Agent will recalculate the Exposure and the Value as of the Recalculation Date by:

(A) utilising any calculations of that part of the Exposure attributable to the Transactions that the parties have agreed are not in dispute;

(B) calculating that part of the Exposure attributable to the Transactions in dispute by seeking four actual quotations at mid-market from Reference Market-makers for purposes of calculating Market Quotation, and taking the arithmetic average of those obtained; *provided* that if four quotations are not available for a particular Transaction, then fewer than four quotations may be used for that Transaction, and if no quotations are available for a particular Transaction, then the Valuation Agent's original calculations will be used for the Transaction; and

(C) utilising the procedures specified in Paragraph 11(e)(ii) for calculating the Value, if disputed, of the outstanding Credit Support Balance;

(ii) in the case of a dispute involving the Value of any transfer of Eligible Credit Support or Equivalent Credit Support, the Valuation Agent will recalculate the Value as of the date of transfer pursuant to Paragraph 11(e)(ii).

Following a recalculation pursuant to this Paragraph, the Valuation Agent will notify each party (or the other party, if the Valuation Agent is a party) as soon as possible but in any event not later than the Notification Time on the Local Business Day following the Resolution Time. The appropriate party will, upon demand following such notice given the Valuation Agent or resolution pursuant to (3) above and subject to Paragraph 3(a), make the appropriate transfer.

(b) *No Event of Default.* The failure by a party to make a transfer of any amount which is the subject of a dispute to which Paragraph 4(a) applies will not constitute an Event of Default for as long as the procedures set out in this Paragraph 4 are being carried out. For the avoidance of doubt, upon completion of those procedures, Section 5(a)(i) of this Agreement will apply to any failure by a party to make a transfer required under the final sentence of Paragraph 4(a) on the relevant due date.

## Paragraph 5. Transfer of Title, No Security Interest, Distributions and Interest Amount

(a) **Transfer of Title.** Each party agrees that all right, title and interest in and to any Eligible Credit Support, Equivalent Credit Support, Equivalent Distributions or Interest Amount which it transfers to the other party under the terms of this Annex shall vest in the recipient free and clear of any liens, claims, charges or encumbrances or any other interest of the transferring party or of any third person (other than a lien routinely imposed on all securities in a relevant clearance system).

(b) *No Security Interest.* Nothing in this Annex is intended to create or does create in favour of either party any mortgage, charge, lien, pledge, encumbrance or other security interest in any cash or other property transferred by one party to the other party under the terms of this Annex.

#### (c) Distributions and Interest Amount.

(i) **Distributions.** The Transferee will transfer to the Transferor not later than the Settlement Day following each Distributions Date cash, securities or other property of the same type, nominal value, description and amount as the relevant Distributions ("Equivalent Distributions") to the extent that a Delivery Amount would not be created or increased by the transfer, as calculated by the Valuation Agent (and the date of calculation will be deemed a Valuation Date for this purpose).

(ii) *Interest Amount.* Unless otherwise specified in Paragraph 11(f)(iii), the Transferee will transfer to the Transferor at the times specified in Paragraph 11(f)(ii) the relevant Interest Amount to the extent that a Delivery Amount would not be created or increased by the transfer, as calculated by the Valuation Agent (and the date of calculation will be deemed a Valuation Date for this purpose).

## Paragraph 6. Default

If any Early Termination Date is designated or deemed to occur as a result of an Event of Default in relation to a party, an amount equal to the Value of the Credit Support Balance, determined as though the Early Termination Date were a Valuation Date, will be deemed to be an Unpaid Amount due to the Transferor (which may or may not be the Defaulting Party) for purposes of Section 6(e). For the avoidance of doubt, if Market Quotation is the applicable payment measure for purposes of Section 6(e), then the Market Quotation determined under Section 6(e) in relation to the Transaction constituted by this Annex will be deemed to be zero, and if Loss is the applicable payment measure for purposes of Section 6(e), then the Loss determined under Section 6(e) in relation to the Transaction will be limited to the Unpaid Amount representing the Value of the Credit Support Balance.

## Paragraph 7. Representation

Each party represents to the other party (which representation will be deemed to be repeated as of each date on which it transfers Eligible Credit Support, Equivalent Credit Support or Equivalent Distributions) that is the sole owner of or otherwise has the right to transfer all Eligible Credit Support, Equivalent Credit Support, Equivalent Distributions it transfers to the other party under this Annex, free and clear of any security interest, lien encumbrance or other restriction (other than lien routinely imposed on all securities in a relevant clearance system).

## Paragraph 8. Expenses

Each party will pay its own costs and expenses (including any stamp, transfer, or similar transaction tax or duty payable on any transfer it is required to make under this Annex) in connection with performing its obligations under this Annex, and neither party will be liable for any such costs and expenses incurred by the other party.

## Paragraph 9. Miscellaneous

(a) **Default Interest**. Other than in the case of an amount which is the subject of dispute under Paragraph 4(a), if a Transferee fails to make, when due, any transfer of Equivalent Credit Support, Equivalent Distributions or the Interest Amount, it will be obliged to pay the Transferor (to the extent permitted under applicable law) an amount equal to interest at the Default Rate multiplied by the Value on the relevant Valuation Date of the items of property that were required to be transferred, from (and including) the date that the Equivalent Credit Support, Equivalent Distributions or Interest Amount were required to be transferred to (but excluding) the date of transfer of the Equivalent Credit Support, Equivalent Distributions or Interest Amount. This interest will be calculated on the basis of daily compounding and the actual number of days elapsed.

(b) *Good Faith and Commercially Reasonable Manner.* Performance of all obligations under this Annex, including, but not limited to, all calculations, valuations and determinations made by either party, will be made in good faith and in a commercially reasonable manner.

(c) *Demands and Notices.* All demands and notices given by a party under this Annex will be given as specified in Section 12 of this Agreement.

(d) *Specifications of Certain Matters.* Anything referred to in this Annex as being specified in Paragraph 11 also may be specified in one or more Confirmations or other documents and this Annex will be construed accordingly.

### **Paragraph 10. Definitions**

As used in this Annex:

"Base Currency" means the currency specified as such in Paragraph 11(a)(i).

"Base Currency Equivalent" means, with respect to an amount on a Valuation Date, in the case of an amount denominated in the Base Currency, such Base Currency and, in the case of an amount denominated in a currency other than the Base Currency (the "Other Currency"), the amount of Base Currency required to purchase such amount of the Other Currency at the spot exchange rate determined by the Valuation Agent for value on such Valuation Date.

"Credit Support Amount" means, with respect to a Transferor on a Valuation Date, (i) the Transferee's Exposure plus (ii) all Independent Amounts applicable to the Transferor, if any, minus (iii) all Independent Amounts applicable to the Transferee, if any, minus (iv) the Transferor's Threshold; *provided, however*, that the Credit Support Amount will be deemed to be zero whenever the calculation of Credit Support Amount yields a number less than zero.

"*Credit Support Balance*" means, with respect to a Transferor on a Valuation Date, the aggregate of all Eligible Credit Support that has been transferred to or received by the Transferee under this Annex, together with any Distributions and all proceeds of any such Eligible Credit Support or Distributions, as reduced pursuant to Paragraph 2(b), 3(c)(i) or 6. Any Equivalent Distributions or Interest Amount (or portion of either) not transferred pursuant to Paragraph 5(c)(i) or (ii) will form part of the Credit Support Balance.

"Delivery Amount" has the meaning specified in Paragraph 2(a).

"Disputing Party" has the meaning specified in Paragraph 4.

"*Distributions*" means, with respect to any Eligible Credit Support comprised in the Credit Support Balance consisting of securities, all principal, interest and other payments and distributions of cash or other property to which a holder of securities of the same type, nominal value, description and amount as such Eligible Credit Support would be entitled from time to time.

"*Distribution Date*" means, with respect to any Eligible Credit Support comprised in the Credit Support Balance other than cash, each date on which a holder of such Eligible Credit Support is entitled to receive Distributions or, if that date is not a Local Business Day, the next following Local Business Day.

*"Eligible Credit Support"* means, with respect to a party, the items, if any, specified as such for that party in Paragraph 11(b)(ii) including, in relation to any securities, if applicable, the proceeds of any redemption in whole or in party of such securities by the relevant issuer.

"*Eligible Currency*" means each currency specified as such in Paragraph 11(a)(ii), if such currency is freely available.

*"Equivalent Credit Support"* means, in relation to any Eligible Credit Support comprised in the Credit Support Balance, Eligible Credit Support of the same type, nominal value, description and amount as that Eligible Credit Support.

"Equivalent Distributions" has the meaning specified in Paragraph 5(c)(i).

"Exchange Date" has the meaning specified in Paragraph 11(d).

"*Exposure*" means, with respect to a party on a Valuation Date and subject to Paragraph 4 in the case of a dispute, the amount, if any, that would be payable to that party by the other party (expressed as a positive number) or by that party to the other party (expressed as a negative number) pursuant to Section 6(e)(ii)(1) of this Agreement if all Transactions (other than the Transaction constituted by this Annex) were being terminated as of the relevant Valuation Time, on the basis that (i) that party is not the Affected Party and (ii) the Base Currency is the Termination Currency; *provided* that Market Quotations will be determined by the Valuation Agent on behalf of that party using its estimates at mid-market of the amounts that would be paid for Replacement Transactions (as that term is defined in the definition of "Market Quotation").

"Independent Amount" means, with respect to a party, the Base Currency Equivalent of the amount specified as such for that party in Paragraph 11(b)(iii)(A); if not amount is specified, zero.

"Interest Amount" means, with respect to an Interest Period, the aggregate sum of the Base Currency Equivalents of the amounts of interest determined for each relevant currency and calculated for each day in that Interest Period on the principal amount of the portion of the Credit Support Balance comprised of cash in such currency, determined by the Valuation Agent for each such day as follows:

- (x) the amount of cash in such currency on that day; multiplied by
- (y) the relevant Interest Rate in effect for that day; divided by
- (z) 360 (or, in the case of pounds sterling, 365).

*"Interest Period"* means the period from (and including) the last Local Business Day on which an Interest Amount was transferred (or, if no Interest Amount has yet been transferred, the Local Business Day on which Eligible Credit Support or Equivalent Credit Support in the form of cash was transferred to or received by the Transferee) to (but excluding) the Local Business Day on which the current Interest Amount is transferred.

"Interest Rate" means with respect to an Eligible Currency, the rate specified in Paragraph 11(f)(i) for that currency.

"Local Business Day", unless otherwise specified in Paragraph 11(h), means:

(i) in relation to a transfer of cash or other property (other than securities) under this Annex, a day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in the place where the relevant account is located and, if different, in the principal financial centre, if any, of the currency of such payment;

(ii) in relation to a transfer of securities under this Annex, a day on which the clearance system agreed between the parties for delivery of the securities is open for the acceptance and execution of settlement instructions or, if delivery of the securities is contemplated by other means, a day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in the place(s) agreed between the parties for this purpose.

(iii) in relation to a valuation under this Annex, a day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in the place of location of the Valuation Agent and in the place(s) agreed between the parties for this purpose; and

(iv) in relation to any notice or other communication under this Annex, a day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in the place specified in the address for notice most recently provided by the recipient.

"*Minimum Transfer Amount*" means, with respect to a party, the amount specified as such for that party in Paragraph 11(b)(iii)(C); if no amount is specified, zero.

"New Credit Support" has the meaning specified in Paragraph 3(c)(i).

"Notification Time" has the meaning specified in Paragraph 11(c)(iv).

*"Recalculation Date"* means the Valuation Date that gives rise to the dispute under Paragraph 4; *provided however*, that if a subsequent Valuation Date occurs under Paragraph 2 prior to the resolution of the dispute, then the *"Recalculation Date"* means the most recent Valuation Date under Paragraph 2.

"Resolution Time" has the meaning specified in Paragraph 11(c)(i).

"*Return Amount*" has the meaning specified in Paragraph 2(b).

"Settlement Day" means, in relation to a date, (i) with respect to a transfer of cash or other property (other than securities), the next Local Business Day and (ii) with respect to a transfer of securities, the first Local Business Day after such date on which settlement of a trade in the relevant securities, if effected on such date, would have been settled in accordance with customary practice when settling through the clearance system agreed between the parties for delivery of such securities or, otherwise, on the market in which such securities are principally traded (or, in either case, if there is no such customary practice, on the first Local Business Day after such date on which it is reasonably practicable to deliver such securities).

*"Threshold"* means, with respect to a party, the Base Currency Equivalent of the amount specified as such for that party in Paragraph 11(b)(iii)(B); if no amount is specified, zero.

*"Transferee"* means, in relation to each Valuation Date, the party in respect of which Exposure is a positive number and, in relation to a Credit Support Balance, the party which, subject to this Annex, owes such Credit Support Balance or, as the case may be, the Value of such Credit Support Balance to the other party.

"Transferor" means, in relation to a Transferee, the other party.

"Valuation Agent" has the meaning specified in Paragraph 11(c)(i).

"Valuation Date" means each date specified in or otherwise determined pursuant to Paragraph 11(c)(ii).

"Valuation Percentage" means, for any item of Eligible Credit Support, the percentage specified in Paragraph 11(b)(ii).

"Valuation Time" has the meaning specified in Paragraph 11(c)(iii).

"*Value*" means, for any Valuation Date or other date for which Value is calculated, and subject to Paragraph 4 in the case of a dispute, with respect to:

(i) Eligible Credit Support comprised in a Credit Support Balance that is:

(A) an amount of cash, the Base Currency Equivalent of such amount multiplied by the applicable Valuation Percentage, if any; and

(B) a security, the Base Currency Equivalent of the bid price obtained by the Valuation Agent multiplied by the applicable Valuation Percentage, if any; and

(ii) items that are comprised in a Credit Support Balance and are not Eligible Credit Support, zero.

## Paragraph 11. Elections and Variables

## (a) **Base Currency and Eligible Currency.**

- (i) "Base Currency" means CAD.
- (ii) "Eligible Currency" means the Base Currency and each other currency specified here: US Dollars.

## (b) Credit Support Obligations.

## (i) Delivery Amount, Return Amount and Credit Support Amount.

- (A) **"Delivery Amount"**: Paragraph 2(a) shall apply, except that the words, "upon a demand made by the Transferee" shall be deleted and the word "that" on the second line of Paragraph 2(a) shall be replaced with the word "a".
- (B) **"Return Amount"** has the meaning as specified in Paragraph 2(b).
- (C) "Credit Support Amount" has the meaning specified under the relevant definition of Ratings Agency Requirement. In circumstances where more than one of the Ratings Agency Requirements apply to Party A, the Credit Support Amount shall be calculated by reference to the Ratings Agency Requirement which would result in Party A transferring the greatest amount of Eligible Credit Support. Under no circumstances will Party A be required to transfer more Eligible Credit Support than the greatest amount calculated in accordance with the Ratings Agency Requirement set out below.
- (ii) **Eligible Credit Support.** The following items will qualify as "Eligible Credit Support" for Party A:

	Collateral Type	Valuation Percentages in respect of Moody's	Valuation Percentages in respect of Fitch	Valuation Percentages in respect of DBRS
(A)	Cash in:			

	Collateral Type	Valuation Percentages in respect of Moody's	Valuation Percentages in respect of Fitch	Valuation Percentages in respect of DBRS
(i)	a Base Currency;	100%	100%	100%
(ii)	US Dollars.	100%	100%	100%
(B)	Negotiable debt obligations denominated in US Dollars issued by the U.S. Treasury Department (with local and foreign currency issuer ratings equal to or greater than AA- by Fitch and Aa3 by Moody's) having a remaining time to maturity of:	In relation to residual maturity as set out in the corresponding order under Collateral Type:	In relation to residual maturity as set out in the corresponding order under Collateral Type:	In relation to residual maturity as set out in the corresponding order under Collateral Type:
(i)	not more than one year;	99%	97.5%	99%
(ii)	more than one year but not more than 5 years;	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS
(iii)	more than 5 years but not more than 7 years;	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS
(iv)	more than 7 years but not more than 10 years;	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS
(v)	more than 10 years but less than 20 years; or	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS
(vi)	more than 20 years.	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS
C)	Treasury bills denominated in CAD issued by the Government of Canada (with local and foreign currency issuer ratings equal to or greater than AA- by Fitch, Aa3 by Moody's and AA(low) or R-1(mid) by DBRS) having a remaining time to maturity of:			
(i)	not more than one year;	99%	97.5%	99%
(ii)	more than one year but not more than 3 years;	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS
(iii)	more than 3 years but not more than 5 years;	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS
(iv)	more than 5 years but not more than 7 years;	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS
(v)	more than 7 years but not more than 10 years; or	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS
(iv)	more than 10 years.	To be agreed between Party A	To be agreed between Party A	To be agreed between Party A

	Collateral Type	Valuation Percentages in respect of Moody's	Valuation Percentages in respect of Fitch	Valuation Percentages in respect of DBRS
		and Moody's	and Fitch	and DBRS
(D)	Commercial Paper denominated in an Eligible Currency (with a rating equal to or greater than P-1 by Moody's, F1+ by Fitch and R- 1(high) by DBRS) with a remaining time to maturity of less than 35 days.	To be agreed between Party A and Moody's	99.5%	99%
(E)	Such other items as agreed between Party A and the Rating Agencies, from time to time, which Party B can lawfully receive from, and transfer back to, Party A as required, that will qualify as Eligible Credit Support.	To be agreed between Party A and Moody's	To be agreed between Party A and Fitch	To be agreed between Party A and DBRS

For the avoidance of doubt, where negotiable debt obligations are rated by only one of the above relevant rating agencies, the rating applied will be based on the rating of that agency.

Where the ratings and/or the Valuation Percentages of the relevant rating agencies differ with respect to the same negotiable debt obligation, for the purposes of B to E above the lower of the ratings and/or the Valuation Percentages, as the case maybe, shall apply.

For the purpose of this Annex, references to the "relevant rating agency" shall mean the rating agency whose Ratings Agency Requirement will be used to determine the amount of Eligible Credit Support that Party A is required to transfer to Party B following a credit ratings downgrade of Party A.

## (iii) Thresholds.

- (A) **"Independent Amount"** means, for Party A and Party B, with respect to each Transaction, zero.
- (B) **"Threshold"** means, for Party A:

Infinity, unless (A) (i) an Initial Rating Event AND (ii) Party A has not otherwise complied with Part 5(k)(i) of the Agreement, OR (B) (i) a Subsequent Rating Event has occurred AND (ii) Party A has not otherwise complied with Part 5(k)(i) of the Agreement, then its Threshold shall be zero.

"Threshold" means, for Party B: Infinity.

- (C) "Minimum Transfer Amount" means, with respect to Party A and Party B, CAD 50,000; provided, that if (1) an Event of Default has occurred and is continuing with respect to Party A, or (2) an Additional Termination Event has occurred in respect of which Party A is an Affected Party, the Minimum Transfer Amount with respect to such party shall be zero.
- (D) **"Rounding"** The Delivery Amount and the Return Amount will be rounded up and down to the nearest integral multiple of CAD 10,000 respectively, subject to the maximum Return Amount being equal to the Credit Support Balance.

#### (c) Valuation and Timing.

- (i) **"Valuation Agent"** means, Party A in all circumstances.
- (ii) **"Valuation Date"** means each Local Business Day in Toronto.

- (iii) **"Valuation Time"** means 5.00 p.m. Toronto time on the Local Business Day immediately preceding the Valuation Date or date of calculation, as applicable; provided that the calculations of Value and Exposure will be made at approximately the same time on the same date.
- (iv) "Notification Time" means by 1:00 p.m., Toronto time, on a Local Business Day.
- (d) **Exchange Date.** "Exchange Date" has the meaning specified in paragraph 3(c)(ii).

## (e) **Dispute Resolution.**

- (i) **"Resolution Time"** means 1:00 p.m., Toronto time, on the Local Business Day following the date on which notice is given that gives rise to a dispute under Paragraph 4.
- (ii) **"Value"**. For the purpose of Paragraph 4(a)(4)(i)(C) and 4(a)(4)(ii), the Value of the outstanding Credit Support Balance or of any transfer of Eligible Credit Support or Equivalent Credit Support, as the case may be, will be calculated as follows:
  - (A) with respect to any Eligible Credit Support or Equivalent Credit Support comprising securities ("Securities") the Base Currency Equivalent of the sum of (a)(x) the last bid price on such date for such Securities on the principal national securities exchange on which such Securities are listed, multiplied by the applicable Valuation Percentage; or (y) where any Securities are not listed on a national securities exchange, the bid price for such Securities quoted as at the close of business on such date by any principal market maker (which shall not be and shall be independent from the Valuation Agent) for such Securities chosen by the Valuation Agent, multiplied by the applicable Valuation Percentage; or (z) if no such bid price is listed or quoted for such date, the last bid price listed or quoted (as the case may be), as of the day next preceding such date on which such prices were available, multiplied by the applicable Valuation Percentage; plus (b) the accrued interest where applicable on such Securities (except to the extent that such interest shall have been paid to the Transferor pursuant to Paragraph 5(c)(ii) or included in the applicable price referred to in subparagraph (a) above) as of such date;
  - (B) with respect to any Cash, the Base Currency Equivalent of the amount thereof; and
  - (C) with respect to any Eligible Credit Support or Equivalent Credit Support other than Securities and Cash, the Base Currency Equivalent of the fair market value thereof on such date, as determined in any reasonable manner chosen by the Valuation Agent, multiplied by the applicable Valuation Percentage.
- (iii) "Alternative". The provisions of Paragraph 4 will apply.

#### (f) **Distribution and Interest Amount.**

(i) **"Interest Rate".** The "*Interest Rate*" in relation to each Eligible Currency specified below will be:

**Interest Rate** The "Interest Rate" will be the Federal Funds Rate. "Federal Funds Rate" means, for any day, the rate set forth in H.15 (519) for that day opposite the caption "Federal Funds (Effective)". If on any day such rate is not yet published in H.15 (519), the rate for such day will be the rate set forth in Composite 3:30 p.m. Quotations for U.S. Government Securities for that day under the caption "Federal Funds / Effective Rate". If on any day the appropriate rate for such day is not yet published in either H.15 (519) or Composite 3:30 p.m. Ouotations for U.S. Government Securities, the rate for such day will be the arithmetic mean of the rates for the last transaction in overnight U.S. Dollar Federal funds arranged by three leading brokers of U.S. Dollar

USD

**Eligible Currency** 

Federal funds transactions in New York City selected jointly by Party A and Party B prior to 9:00 a.m., New York City time, on such day. "H.15 (519)" means the weekly statistical release designated as such, or any successor publication, published by the Board of Governors of the Federal Reserve System. "Composite 3:30 p.m. Quotations for U.S. Government Securities" means the daily statistical release designated as such, or any successor publication, published by the Federal Reserve Bank of New York.

The "Interest Rate" will be the Bank of Canada Target Rate. "Bank of Canada Target Rate" means, for any day, the bank rate set by the Bank of Canada and which can be found on the Bank of Canada's Web page http://www.bankofcanada.ca/en/monetary/ target.html on the relevant day.

- (ii) "Transfer of Interest Amount". The transfer of the Interest Amount will be made on the second Local Business Day following the end of each calendar month to the extent that Party B has earned and received such amount of interest and that a Delivery Amount would not be created or increased by that transfer, and on any other Local Business Day on which Equivalent Credit Support is transferred to the Transferor pursuant to Paragraph 2(b), provided that Party B shall only be obliged to transfer any Interest Amount to Party A to the extent that it has received such amount.
- (iii) **"Alternative to Interest Amount".** The provisions of Paragraph 5(c)(ii) will apply. For the purposes of calculating the Interest Amount the amount of interest calculated for each day of the Interest Period shall, with respect to any Eligible Currency, be compounded daily.
- (iv) **"Interest Amount".** The definition of "*Interest Amount*" shall be deleted and replaced with the following:

"*Interest Amount*" means, with respect to an Interest Period and each portion of the Credit Support Balance comprised of cash in an Eligible Currency, the sum of the amounts of interest determined for each day in that Interest Period by the Valuation Agent as follows:

- (x) the amount of such currency comprised in the Credit Support Balance at the close of business for general dealings in the relevant currency on such day (or, if such day is not a Local Business Day, on the immediately preceding Local Business Day); multiplied by
- (y) the relevant Interest Rate; divided by
- (z) 360 (or in the case of pounds sterling, 365).

## (g) Addresses for Transfers.

Party A:

USD Cash Royal Bank of Canada c/o JPMorgan Chase Bank, N.A. Account number: The second Canada, New York Branch For the account Royal Bank of Canada, New York Branch Ref: RBC Covered Bond Guarantor Limited Partnership

#### CAD Cash

To be advised.

Party B:

To be advised.

CAD

## (h) **Other Provisions.**

## (i) Transfer Timing.

(A) The final paragraph of Paragraph 3(a) shall be deleted and replaced with the following:

"Subject to Paragraph 4, and unless otherwise specified, any transfer of Eligible Credit Support or Equivalent Credit Support (whether by the Transferor pursuant to Paragraph 2(a) or by the Transferee pursuant to Paragraph 2(b)) shall be made not later than the close of business on the Settlement Day."

(B) The definition of Settlement Day shall be deleted and replaced with the following:

"Settlement Day" means the next Local Business Day after the Demand Date".

(C) For the purposes of this Paragraph 11(h)(i):

"Demand Date" means, with respect to a transfer by a party:

- (i) in the case of a transfer pursuant to Paragraph 2, Paragraph 3 or Paragraph 4(a)(2), the relevant Valuation Date. For the avoidance of doubt, for the purposes of Paragraph 2 and Paragraph 4(a)(2), the Transferor will be deemed to receive notice of the demand by the Transferee to make a transfer of Eligible Credit Support; and
- (ii) in the case of a transfer pursuant to Paragraph 3(c)(ii)(A), the date on which the Transferee has given its consent to the proposed exchange.

For the avoidance of doubt, on each Demand Date the Transferor shall deliver to the Transferee and the Trustee a statement showing the amount of Eligible Credit Support to be delivered.

#### (ii) Early Termination.

The heading for Paragraph 6 shall be deleted and replaced with "Early Termination" and the following shall be added after the word "Default" in the first line of Paragraph 6, "or a Termination Event in relation to all (but not less than all) Transactions". The words "or an Affected Party" shall be added after the word "Party" in the fourth line of Paragraph 6.

## (iii) Costs of Transfer on Exchange.

Notwithstanding Paragraph 8, the Transferor will be responsible for, and will reimburse the Transferee for, all transfer and other taxes and other costs involved in the transfer of Eligible Credit Support either from the Transferor to the Transferee or from the Transferee to the Transferor hereto.

## (iv) Cumulative Rights.

The rights, powers and remedies of the Transferee under this Annex shall be in addition to all rights, powers and remedies given to the Transferee by the Agreement or by virtue of any statute or rule of law, all of which rights, powers and remedies shall be cumulative and may be exercised successively or concurrently without impairing the rights of the Transferee in the Credit Support Balance created pursuant to this Annex.

## (v) Single Transferor and Single Transferee.

Party A and Party B agree that, notwithstanding anything to the contrary in this Annex, (including, without limitation, the recital hereto, Paragraph 2 or the definitions in Paragraph 10), (a) the term "*Transferee*" as used in this Annex means only Party B; (b) the term "*Transferor*" as used in this Annex means only Party A; (c) only Party A will be required to make transfers of Eligible Credit Support under Paragraph 2(a); and (d) in the calculation of any Credit Support Amount, where the Transferee's Exposure would be expressed as a negative number, such Exposure shall be deemed to be zero.

## (vi) Ratings Agency Requirement.

"**Rating Agency Requirement**" means the Moody's Requirements, the DBRS Requirements and the Fitch Requirements, as defined below.

### (i) Moody's Requirements.

"**Credit Support Amount**" shall equal, with respect to a Transferor on a Valuation Date, (A) the greater of:

- (i) zero;
- (ii) the aggregate amount of the Next Payments (each determined based on the rates prevailing on such Valuation Date) for all Next Payment Dates; and
- (iii) the sum of (x) the Transferee's Exposure and (y) the aggregate of the Moody's Additional Amounts for all Transactions,

less (B) the Threshold for Party A.

## "Moody's Additional Amount" means:

- (A) in respect of any Transaction that is both a cross-currency hedge and an Optionality Hedge, the lesser of (x) the sum of (1) the product of Transaction Notional Amount for such Transaction for the Calculation Period which includes such Valuation Date and the Moody's Cross Currency Notional Amount Lower Multiplier and (2) the product of the Moody's Cross Currency DV01 Multiplier (Optionality) and the Transaction Cross Currency DV01 for such Transaction and (y) the product of the Moody's Cross Currency Notional Amount Higher Multiplier (Optionality) and the Transaction Notional Amount for such Transaction for the Calculation Period which includes such Valuation Date;
- (B) in respect of any Transaction that is a cross-currency hedge and is not an Optionality Hedge, the lesser of (x) the sum of (1) the product of Transaction Notional Amount for such Transaction for the Calculation Period which includes such Valuation Date and the Moody's Cross Currency Notional Amount Lower Multiplier and (2) the Moody's Cross Currency DV01 Multiplier and the Transaction Cross Currency DV01 for such Transaction and (y) the product of the Moody's Cross Currency Notional Amount Higher Multiplier and the Transaction Notional Amount for such Transaction for the Calculation Period which includes such Valuation Date;
- (C) in respect of any Transaction that is not a cross-currency hedge and is an Optionality Hedge, the lesser of (x) the product of the Moody's Single Currency DV01 Multiplier (Optionality) and the Transaction Single Currency DV01 for such Transaction and (y) the product of the Moody's Single Currency Notional Amount Multiplier (Optionality) and the Transaction Notional Amount for such Transaction for the Calculation Period which includes such Valuation Date; and
- (D) in respect of any Transaction that is neither a cross-currency hedge nor an Optionality Hedge, the lesser of (x) the product of the Moody's Single Currency DV01 Multiplier and the Transaction Single Currency DV01 for such Transaction and (y) the product of the Moody's Single Currency Notional Amount Multiplier and the Transaction Notional Amount for such Transaction for the Calculation Period which includes such Valuation Date.

**"Moody's Cross Currency DV01 Multiplier"** means, (A) if each Local Business Day is a Valuation Date, 15 and (B) otherwise, 25.

**"Moody's Cross Currency DV01 Multiplier (Optionality)"** means, (A) if each Local Business Day is a Valuation Date, 30 and (B) otherwise, 40.

**"Moody's Cross Currency Notional Amount Higher Multiplier"** means, (A) if each Local Business Day is a Valuation Date, 0.09 and (B) otherwise, 0.1.

**"Moody's Cross Currency Notional Amount Higher Multiplier (Optionality)"** means, (A) if each Local Business Day is a Valuation Date, 0.11 and (B) otherwise, 0.12.

**"Moody's Cross Currency Notional Amount Lower Multiplier"** means, (A) if each Local Business Day is a Valuation Date, 0.06 and (B) otherwise, 0.07.

**"Moody's Single Currency DV01 Multiplier"** means, (A) if each Local Business Day is a Valuation Date, 50 and (B) otherwise, 60.

**"Moody's Single Currency DV01 Multiplier (Optionality)"** means, (A) if each Local Business Day is a Valuation Date, 65 and (B) otherwise, 75.

**"Moody's Single Currency Notional Amount Multiplier"** means, (A) if each Local Business Day is a Valuation Date, 0.08 and (B) otherwise, 0.09.

**"Moody's Single Currency Notional Amount Multiplier (Optionality)"** means, (A) if each Local Business Day is a Valuation Date, 0.10 and (B) otherwise, 0.11.

**"Next Payment"** means, in respect of each Next Payment Date, the greater of (i) the Base Currency Equivalent of any payments due to be made by Party A under Section 2(a) on such Next Payment Date less the Base Currency Equivalent of any payments due to be made by Party B under Section 2(a) on such Next Payment Date and (ii) zero.

"Next Payment Date" means each date on which the next scheduled payment under any Transaction (other than the Transaction constituted by this Annex) is due to be paid.

"Optionality Hedge" means any Transaction that is a cap, floor, swaption, or a Transaction-Specific Hedge.

**"Transaction Cross Currency DV01"** means, with respect to a Transaction and any date of determination, the greater of (i) the estimated change in the mid-market value with respect to such Transaction that would result from a one basis point change in the relevant swap curve (denominated in the currency of Party A's payment obligations under such Transaction) on such date and (ii) the estimated change in the mid-market value with respect to such Transaction that would result from a one basis point change in the relevant swap curve (denominated in the currency of Party B's payment obligations under such Transaction) on such date, in each case as determined by the Valuation Agent in good faith and in a commercially reasonable manner in accordance with the relevant methodology customarily used by the Valuation Agent.

**"Transaction Notional Amount"** means (A) in respect of any Transaction that is a cross currency hedge, the Base Currency Equivalent of the Currency Amount applicable to Party A's payment obligations and (B) in respect of any other Transaction, the Base Currency Equivalent of the Notional Amount.

**"Transaction Single Currency DV01"** means, with respect to a Transaction and any date of determination, the estimated change in the mid-market value with respect to such Transaction that would result from a one basis point change in the relevant swap curve on such date, as determined by the Valuation Agent in good faith and in a commercially reasonable manner in accordance with the relevant methodology customarily used by the Valuation Agent.

**"Transaction-Specific Hedge"** means any Transaction in respect of which the Transaction Notional Amount for each Calculation Period is "balance guaranteed" or otherwise not an amount that is fixed at the inception of the Transaction.

(ii) Fitch Requirements.

"Credit Support Amount" shall mean, with respect to a Transferor on the Valuation Date:

(a) if the long-term issuer default rating by Fitch of Party A or its Credit Support Provider is below the Minimum Fitch Rating (as defined in Part 5(k) of the Schedule to the Agreement) but the short-term issuer default rating by Fitch of Party A or its Credit Support Provider is at least as high as "F2" (or its equivalent) and the long-term issuer default rating by Fitch of Party A or its Credit Support Provider is at least as high as "A-" (or its equivalent), the result of the following formula:

max [0; MV plus (Liquidity Adjustment multiplied by VC multiplied by 70% multiplied by N)]; and

(b) if the long-term issuer default rating by Fitch of Party A or its Credit Support Provider ceases to be at least as high as "A-" (or its equivalent), but the short-term, issuer default rating by Fitch of Party A or its Credit Support Provider are rated at least as high as "F2" (or its equivalent) and the long-term issuer default rating by Fitch of Party A or its Credit Support Provider is at least as high as "BBB+" (or its equivalent), the result of the following formula:

max [0; MV plus (Liquidity Adjustment multiplied by VC multiplied by N)]; and

(c) if the issuer default rating by Fitch of Party A or its Credit Support Provider ceases to be at least "F2" (or its equivalent) or the long-term issuer default rating by Fitch of Party A or its Credit Support Provider ceases to be at least as high as "BBB+" (or its equivalent), the result of the following formula:

max [0; MV plus (Liquidity Adjustment multiplied by VC multiplied by N multiplied by 1.25)];

where:

"**BLA**" means basic liquidity adjustment which is 0% or 25% as determined by Fitch in accordance with the Fitch Criteria;

"**Liquidity Adjustment**" means (1 + BLA) multiplied by (1 plus max (0%; 5% multiplied by (WAL - 20));

"**max**" means maximum;

"MV" means the Transferee's Exposure;

"VC" means the applicable volatility cushion at that time as determined by reference to percentages set out in the relevant table under the section headed "Volatility Cushions" in the addendum entitled "Counterparty Criteria for Structured Finance and Covered Bonds: Derivative Addendum" published by Fitch and dated May 13, 2013 as amended and supplemented from time to time;

"N" means the applicable current notional amount which derivative payments are based on. Where the notional amount differs for the various legs of a Transaction, the highest notional amount is expected to be used;

"WAL" means the applicable weighted average life of the Transaction determined in the manner described in "Volatility Cushions" appearing in the Fitch Criteria; and

"**Fitch Criteria**" means the criteria used by Fitch as set out in the reports by Fitch Ratings dated May 13, 2013 and headed "Counterparty Criteria for Structured Finance and Covered Bonds" and "Counterparty Criteria for Structured Finance Transactions: Derivative Addendum", each as amended and supplemented from time to time.

Where more than one Transaction is outstanding under this Agreement, to the extent that termination payments are expected to be netted, the applicable formula set out above will be applied after summing the MV, VC and Liquidity Adjustment of each individual Transaction.

*(iii)* DBRS Requirements.

"Credit Support Amount" shall be calculated in accordance with the meaning specified in Paragraph 10, provided however, if the long-term unsecured and unsubordinated debt obligations of Party A (or its successor) or any guarantor of Party A's obligations under the Agreement are downgraded below "A (high)" by DBRS, or if the short-term unsecured and unsubordinated debt obligations of Party A (or its successor) or any guarantor of Party A's obligations under the Agreement are downgraded below "A (high)" by DBRS, or if successor) or any guarantor of Party A's obligations under the Agreement are downgraded below "R-1(middle)" by DBRS, Party A shall propose in writing to DBRS the additional amount, if any, that the Credit Support Amount should increase to due to such downgrade event and, within a reasonable time, DBRS will confirm in writing that such additional amount is sufficient to maintain the DBRS rating of the applicable series of the Royal Bank of Canada's €15 billion Global Covered Bond Programme.

#### (vii) Calculations.

Paragraph 3(b) of this Annex shall be amended by inserting the words "and shall provide each party (or the other party, if the Valuation Agent is a party) with a description in reasonable detail of how such calculations were made, upon request" after the word "calculations" in the third line thereof.

#### (viii) Demands and Notices.

All demands, specifications and notices under this Annex will be made pursuant to Section 12 of this Agreement.

#### (ix) Exposure.

For the purpose of calculating "Exposure" in Paragraph 10 of the Annex, the Valuation Agent shall, unless otherwise agreed in writing by the Rating Agencies, seek two quotations from Reference Market-makers; provided that if two Reference Market-makers are not available to provide a quotation, then fewer than two Reference Market-makers may be used for such purpose, and if no Reference Market-makers are available, then the Valuation Agent's estimates at mid-market will be used. Where more than one quotation is obtained, the quotation representing the greatest amount of Exposure shall be used by the Valuation Agent.

#### (x) Definitions.

As used in this Annex, the following terms shall mean:

"Cross-Currency Swap" means any cross-currency swap rate transaction between Party A and Party B entered into pursuant to the Agreement as evidenced by a Confirmation;

"DBRS" means DBRS Limited and includes any successors;

"Fitch" means Fitch Ratings Ltd and includes any successors thereto;

"Interest Rate Cap" means any interest rate cap transaction entered into pursuant to the Agreement between Party A and Party B as evidenced by a Confirmation;

"Interest Rate Swap" means any interest rate swap transaction entered into pursuant to the Agreement between Party A and Party B as evidenced by a Confirmation;

"Libor Basis Swap" means any libor basis swap transaction between Party A and Party B entered into pursuant to the Agreement as evidenced by a Confirmation.

"Moody's" means Moody's Investors Service Limited and includes any successors thereto;

"Rating Agencies" means Moody's, DBRS and Fitch;

"Transaction" means a Transaction entered into pursuant to this Agreement; and

"**Transaction Notional Amount**" means in respect of a Valuation Date, the Currency Amount applicable to Party A in respect of a Cross Currency Swap Transaction, or in respect of an Interest Rate Swap Transaction, the Notional Amount of such Interest Rate Swap Transaction, each as at such Valuation Date.

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Royal Bank of Canada

(Name of Party)

RBC Covered Bond Guarantor Limited Partnership, acting by its managing general partner, RBC Covered Bond GP Inc.

(Name of Party)

By: <u>"James Salem"</u>..... Name: James Salem Title: Executive Vice-President and Treasurer Date: August 1, 2014 By: <u>"James Salem"</u>.....

Name: James Salem Title: Director Date: August 1, 2014