



ROYAL BANK OF CANADA

(a Canadian chartered bank)

4th Supplementary Notes Base Prospectus dated September 5, 2018

Pursuant to the Programme for the Issuance of Securities

Pages i to 145 (inclusive) of the Notes Base Prospectus dated January 31, 2018 (the “**Notes Base Prospectus**”), as supplemented by the 1st Supplementary Prospectus dated February 28, 2018, the 2nd Supplementary Prospectus dated June 1, 2018 and the 3rd Supplementary Prospectus dated July 31, 2018 of Royal Bank of Canada (“**RBC**” or the “**Issuer**”) comprise a base prospectus (the “**Base Prospectus**”) for the purposes of Article 5.4 of the Prospectus Directive (as defined herein) in respect of notes (“**PD Notes**” or “**Notes**”) to be offered to the public in the Relevant Member States (as defined in the Base Prospectus) and/or to be admitted to the Official List of the Financial Conduct Authority (in its capacity as competent authority for the purposes of Part VI of the Financial Services and Markets Act 2000 as amended, the “**UK Listing Authority**”) and admitted to trading on the Regulated Market of the London Stock Exchange plc (the “**London Stock Exchange**”). Pages 146 to 218 (inclusive) of the Notes Base Prospectus, as supplemented by the 1st Supplementary Offering Circular dated February 28, 2018, the 2nd Supplementary Offering Circular dated June 1, 2018 and the 3rd Supplementary Offering Circular dated July 31, 2018 comprise an offering circular (the “**Offering Circular**”), which has been prepared by the Issuer in connection with the issue of Notes other than PD Notes (“**Non PD Notes**”). The Offering Circular has not been reviewed or approved by the UK Listing Authority and does not constitute a base prospectus for purposes of the Prospectus Directive.

SUPPLEMENTARY PROSPECTUS

Pages 1 to 12 inclusive of this supplement (the “**4th Supplementary Prospectus**”) constitute a supplementary prospectus for purposes of Section 87G of the *Financial Services and Markets Act 2000* (the “**FSMA**”) prepared in connection with the programme for the issuance of securities established by RBC (the “**Programme**”). The information on pages 13 to 15 inclusive of this supplement constitutes a supplementary offering circular and does not form part of this 4th Supplementary Prospectus.

Terms defined in the Base Prospectus have the same meaning when used in this 4th Supplementary Prospectus. The 4th Supplementary Prospectus is supplemental to, and shall be read in conjunction with, the Base Prospectus and any other supplements to the Base Prospectus issued by RBC.

RBC accepts responsibility for the information in this 4th Supplementary Prospectus. To the best of the knowledge of RBC, having taken reasonable care to ensure that such is the case, the information contained in this 4th Supplementary Prospectus is in accordance with the facts and does not omit anything likely to affect the import of such information.

The purpose of this 4th Supplementary Prospectus is to (a) incorporate by reference in the Base Prospectus the Issuer’s unaudited interim condensed consolidated financial statements (the “**Third Quarter 2018 Financial Statements**”), together with Management’s Discussion and Analysis (the “**Third Quarter 2018 MD&A**”) for the three- and nine- month periods ended July 31, 2018 set out in the Issuer’s Third Quarter 2018 Report to Shareholders (the “**Third Quarter 2018 Report to Shareholders**”); (b) include a new statement in respect of no significant change; (c) following the publication of the Third Quarter 2018 Report to

Shareholders, update paragraph 3 of the section entitled “General Information and Recent Developments” in the Base Prospectus regarding governmental, legal or arbitration proceedings which may have, or have had, a significant effect on the financial position or profitability of the Issuer or of the Issuer and its subsidiaries taken as a whole; (d) update certain sections of the Base Prospectus in light of regulatory developments in Singapore; (e) update certain sections of the Base Prospectus to include references to the Sterling Overnight Index Average (“**SONIA**”); (f) update Element B.12 of the Programme Summary to reflect financial information incorporated by reference by virtue of this 4th Supplementary Prospectus; and (g) update Elements C.9 and D.3 of the Programme Summary to include SONIA.

To the extent that there is any inconsistency between (a) any statement in this 4th Supplementary Prospectus or any statement incorporated by reference into the Base Prospectus by this 4th Supplementary Prospectus and (b) any other statement in, or incorporated by reference in, the Base Prospectus, the statements in (a) above will prevail.

Save as disclosed in this 4th Supplementary Prospectus, no significant new factor, material mistake or inaccuracy relating to the information included in the Base Prospectus which is capable of affecting the assessment of PD Notes issued under the Programme has arisen or been noted, as the case may be, since the publication of the 3rd Supplementary Notes Base Prospectus dated July 31, 2018.

DOCUMENTS INCORPORATED BY REFERENCE

RBC’s Third Quarter 2018 Financial Statements, together with the Third Quarter 2018 MD&A, set out on pages 2 through 87 of the Third Quarter 2018 Report to Shareholders are, by virtue of this 4th Supplementary Prospectus, incorporated in, and form part of, the Base Prospectus. The remainder of the Third Quarter 2018 Report to Shareholders is either covered elsewhere in the Base Prospectus or is not relevant for investors.

The Third Quarter 2018 Report to Shareholders, which includes the Third Quarter 2018 Financial Statements and Third Quarter 2018 MD&A, has been filed with Morningstar plc (appointed by the Financial Conduct Authority to act as the National Storage Mechanism) and is available for viewing at <http://www.morningstar.co.uk/uk/NSM> and has been announced via the Regulatory News Service operated by the London Stock Exchange.

For the avoidance of doubt, any document incorporated by reference in the Third Quarter 2018 Financial Statements, Third Quarter 2018 MD&A and Third Quarter 2018 Report to Shareholders shall not form part of this 4th Supplementary Prospectus.

Copies of this 4th Supplementary Prospectus, the Base Prospectus and the documents incorporated by reference in either of these can be (i) viewed on the website of the Regulatory News Service operated by the London Stock Exchange at <http://www.londonstockexchange.com/exchange/news/market-news/market-news-home.html> under the name of the Issuer and the headline “Publication of Prospectus”; and (ii) obtained on written request and without charge from (a) the Issuer at 155 Wellington St. W, 13th Floor, Toronto, Ontario, Canada M5V 3K7, Attention: Senior Vice President, Performance Management & Investor Relations, and (b) the office of the Issuing and Paying Agent, The Bank of New York Mellon, London Branch, One Canada Square, London E14 5AL, United Kingdom, Attention: Manager, EMEA Corporate & Sovereign. Certain of the documents incorporated by reference in the Base Prospectus or this 4th Supplementary Prospectus may be viewed by accessing the Issuer’s disclosure documents through the Internet (a) at the Canadian System for Electronic Document Analysis and Retrieval at www.sedar.com (an internet based securities regulatory filing system), and (b) at the U.S. Securities and Exchange Commission’s website at <http://www.sec.gov>. These websites are not incorporated in, and do not form part of, the Base Prospectus.

STATEMENT OF NO SIGNIFICANT CHANGE

Since July 31, 2018, the date of the most recently published unaudited interim condensed consolidated financial statements of the Issuer, there has been no significant change in the financial or trading position of the Issuer and its subsidiaries taken as a whole.

AMENDMENT TO STATEMENT REGARDING GOVERNMENTAL, LEGAL OR ARBITRATION PROCEEDINGS

Paragraph 3 of the section entitled “General Information and Recent Developments” on page 141 of the Base Prospectus is hereby deleted in its entirety and replaced with the following:

“Other than the matters disclosed under the subsection entitled “Tax examinations and assessments” in Note 23 of the Issuer’s 2017 Audited Consolidated Financial Statements set out on page 189 of the Issuer’s 2017 Annual Report, and the matters disclosed (with the exception of the subsection entitled “Other matters”) in Note 26 of the 2017 Audited Consolidated Financial Statements set out on pages 193 and 194 of the Issuer’s 2017 Annual Report and in each case incorporated by reference herein, as updated by the litigation matters disclosed in Note 11 of the Issuer’s Third Quarter 2018 Financial Statements set out on page 85 of the Issuer’s Third Quarter 2018 Report to Shareholders and incorporated by reference herein, there are no, nor have there been any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer is aware) which may have, or have had during the twelve months prior to the date of this document, individually or in the aggregate, a significant effect on the financial position or profitability of the Issuer or of the Issuer and its subsidiaries taken as a whole”.

SINGAPORE REGULATORY DEVELOPMENTS

In light of regulatory developments in Singapore, certain sections of the Base Prospectus shall be updated as follows:

(a) the information set out on page vii of the Base Prospectus shall be supplemented to include the following:

“Notification under Section 309B(1)(c) of the Securities and Futures Act (Chapter 289) of Singapore (the “SFA”)

Unless otherwise stated in the Final Terms in respect of any Notes, all Notes issued or to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).”

(b) the sections entitled “FORM OF FINAL TERMS OF THE NOTES (*for each Tranche of Notes issued under this Base Prospectus with a denomination less than €100,000 (or its equivalent in another currency)*)” on pages 100 to 113 and “FORM OF FINAL TERMS OF THE NOTES (*for each Tranche of Notes issued under this Base Prospectus with a denomination at least €100,000 (or its equivalent in another currency)*)” on pages 114 to 125 of the Base Prospectus shall be supplemented to include the following paragraph on pages 100 and 114 respectively of the Base Prospectus after the paragraph beginning with “**PRIIPS REGULATION PROHIBITION OF SALES TO EEA RETAIL INVESTORS**”:

“[NOTIFICATION UNDER SECTION 309B(1)(C) OF THE SECURITIES AND FUTURES ACT (CHAPTER 289) OF SINGAPORE (the “SFA”) - [To insert notice if classification of the Notes is not “prescribed capital markets products”², pursuant to Section 309B of the SFA].²]

² Relevant Dealer(s) to consider whether it/they have received the necessary product classification from the Issuer prior to the launch of the offer, pursuant to Section 309B of the SFA.”

SINGAPORE SELLING RESTRICTION

In light of regulatory developments in Singapore, the selling restriction entitled “Singapore” set out on pages 139 to 140 of the Base Prospectus shall be supplemented to include the following as a final paragraph:

“Unless otherwise stated in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement, all Notes issued or to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).”

STERLING OVERNIGHT INDEX AVERAGE (“SONIA”)

(a) Risk Factors

The Risk Factor entitled “**2. Risks related to the structure of a particular issue of Notes**” on pages 24 to 25 of the Base Prospectus is supplemented by inserting the following new risk factor after the paragraph entitled “**Fixed Rate Resettable Notes**” as set out below:

“The market continues to develop in relation to SONIA as a reference rate for Floating Rate Notes

Investors should be aware that the market continues to develop in relation to the Sterling Overnight Index Average (“**SONIA**”) as a reference rate in the capital markets and its adoption as an alternative to Sterling LIBOR. In particular, market participants and relevant working groups are exploring alternative reference rates based on SONIA, including term SONIA reference rates (which seek to measure the market’s forward expectation of an average SONIA rate over a designated term). The market or a significant part thereof may adopt an application of SONIA that differs significantly from that set out in the Conditions and used in relation to Floating Rate Notes that reference a SONIA rate issued under this Prospectus. Interest on Notes which reference a SONIA rate is only capable of being determined at the end of the relevant Observation Period and immediately prior to the relevant Interest Payment Date. It may be difficult for investors in Notes that reference a SONIA rate to reliably estimate the amount of interest that will be payable on such Notes. Further, if the Notes become due and payable under Condition 7, the Rate of Interest payable shall be determined on the date the Notes became due and payable and shall not be reset thereafter. Investors should consider these matters when making their investment decision with respect to any such Floating Rate Notes.”

(b) Amendments to Condition 5.03 (Interest on Floating Rate Notes)

(i) The following subsection shall be inserted at the end of Condition 5.03(iii)(C) (*Screen Rate Determination*) on page 65 of the Base Prospectus:

“(D) Where the Reference Rate is specified in the applicable Final Terms as being “**SONIA**”, the Rate of Interest for each Interest Period will, as provided below, be Compounded Daily SONIA plus or minus (as indicated in the applicable Final Terms) the Margin.

“**Compounded Daily SONIA**” means the rate of return of a daily compound interest investment (with the daily Sterling overnight reference rate as reference rate for the calculation of interest) and will be calculated by the Calculation Agent (or such other party responsible for the calculation of the Rate of Interest, as specified in the

applicable Final Terms) on the Interest Determination Date, as follows, and the resulting percentage will be rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards:

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{\text{SONIA}_{i-5\text{LBD}} \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

where:

“**d**” is the number of calendar days in the relevant Interest Period;

“**d_o**” is the number of London Banking Days in the relevant Interest Period;

“**i**” is a series of whole numbers from one to **d_o**, each representing the relevant London Banking Day in chronological order from, and including, the first London Banking Day in the relevant Interest Period;

“**London Banking Day**” or “**LBD**” means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in London;

“**n_i**”, for any day “**i**”, means the number of calendar days from and including such day “**i**” up to but excluding the following London Banking Day;

“**Observation Period**” means the period from and including the date falling five London Banking Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling five London Banking Days prior to the Interest Payment Date for such Interest Period (or the date falling five London Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

the “**SONIA reference rate**”, in respect of any London Banking Day, is a reference rate equal to the daily Sterling Overnight Index Average (“**SONIA**”) rate for such London Banking Day as provided by the administrator of SONIA to authorised distributors and as then published on the Relevant Screen Page or, if the Relevant Screen Page is unavailable, as otherwise published by such authorised distributors, in each case on the London Banking Day immediately following such London Banking Day; and

“**SONIA_{i-5LBD}**” means, in respect of any London Banking Day falling in the relevant Observation Period, the SONIA reference rate for the London Banking Day falling five London Banking Days prior to the relevant London Banking Day “**i**”.

If, in respect of any London Banking Day in the relevant Observation Period, the SONIA reference rate is not available on the Relevant Screen Page or has not otherwise been published by the relevant authorised distributors, such SONIA reference rate shall be: (i) the Bank of England’s Bank Rate (the “**Bank Rate**”) prevailing at close of business on the relevant London Banking Day; plus (ii) the mean of the spread of the SONIA reference rate to the Bank Rate over the previous five days on which a SONIA reference rate has been published, excluding the highest spread (or, if there is more than one highest spread, one only of those highest spreads) and lowest spread (or, if there is more than one lowest spread, one only of those lowest spreads) to the Bank Rate.

Notwithstanding the paragraph above, in the event of the Bank of England publishes guidance as to (i) how the SONIA rate is to be determined or (ii) any rate that is to replace the SONIA rate, the Issuing and Paying Agent (or such other party responsible for the calculation of the Rate of Interest, as specified in the applicable Final Terms) shall follow such guidance in order to determine SONIA, for purposes of the Notes for so long as the SONIA rate is not available or has not been published by the authorised distributors.

In the event that the Rate of Interest cannot be determined in accordance with the foregoing provisions, the Rate of Interest shall be (i) that determined as at the last preceding Interest Determination Date (though substituting, where a different Margin or Maximum Rate of Interest or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin

or Maximum Rate of Interest or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to that last preceding Interest Period) or (ii) if there is no such preceding Interest Determination Date, the initial Rate of Interest which would have been applicable to such Series of Notes for the first Interest Period had the Notes been in issue for a period equal in duration to the scheduled first Interest Period but ending on (and excluding) the Interest Commencement Date (but applying the Margin and any Maximum Rate of Interest or Minimum Rate of Interest applicable to the first Interest Period).

If the relevant Series of Notes become due and payable in accordance with Condition 7, the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the applicable Final Terms, be deemed to be the date on which such Notes became due and payable and the Rate of Interest on such Notes shall, for so long as any such Note remains outstanding, be that determined on such date.”

(c) Forms of Final Terms

The following items in the sections entitled "FORM OF FINAL TERMS OF THE NOTES (*for each Tranche of Notes issued under this Base Prospectus with a denomination less than €100,000 (or its equivalent in another currency)*)" on pages 100 to 113 and "FORM OF FINAL TERMS OF THE NOTES (*for each Tranche of Notes issued under this Base Prospectus with a denomination at least €100,000 (or its equivalent in another currency)*)" on pages 114 to 125 of the Base Prospectus shall be deleted and replaced with the following:

8. Interest Basis: [] per cent. Fixed Rate] [subject to change as indicated in paragraph 10 below]
- [SONIA] [[] month] /LIBOR /EURIBOR /CDOR /STIBOR /BBSW /CNH HIBOR /HIBOR]] [+/-][] per cent. Floating Rate] [subject to change as indicated in paragraph 10 below]
- [Fixed Rate Resettable Notes]
- [Zero Coupon]
- (further particulars specified below)

14. Floating Rate Note Provisions [Applicable/Not Applicable]
(Condition 5.03)

- (viii) Screen Rate Determination: [Applicable] [Not Applicable]
- Reference Rate: [SONIA] [[] month] [LIBOR] [EURIBOR] [CDOR] [STIBOR] [BBSW] [CNH HIBOR] [HIBOR]]
- Interest Determination Date(s): [] [[] London Banking Day prior to the end of each Interest Period]
- Relevant Screen Page: []
- Relevant Time: [] [Not Applicable]
- Reference Banks: [] [Not Applicable]
- Relevant Financial Centre: [] [Not Applicable]

UPDATES TO THE SUMMARY TO THE PROGRAMME

The Summary to the Programme included in the Base Prospectus is made up of disclosure requirements known as “Elements”. These Elements are numbered in Sections A to E (A.1 – E.7).

Following the release of RBC’s Third Quarter 2018 Report to Shareholders, Element B.12 of the Summary to the Programme is updated as set out below:

B.12	Key Historical Financial Information; no material adverse change and no significant change statements:	With the exception of the figures for return on common equity, information in the tables below for the years ended October 31, 2017 and 2016 and for the nine-month periods ended July 31, 2018 and 2017 have been extracted from the Issuer’s 2017 audited consolidated financial statements and the unaudited interim condensed consolidated financial statements for the nine-month period ended July 31, 2018, respectively, which have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and are incorporated by reference in the Base Prospectus. The amounts under return on common equity for the years ended October 31, 2017 and 2016 and for the nine-month periods ended July 31, 2018 and 2017 have been extracted from the Issuer’s 2017 Management’s Discussion and Analysis and the Third Quarter 2018 Management’s Discussion and Analysis, respectively:
------	--	---

Selected Consolidated Balance Sheet Information

	As at July 31, 2018	As at October 31, 2017	As at October 31, 2016
	<i>(in millions of Canadian dollars)</i>		
Loans, net of allowance for loan losses	563,097	542,617	521,604
Total assets	1,292,374	1,212,853	1,180,258
Deposits	832,261	789,635	757,589
Other liabilities	371,716	338,309	340,314
Subordinated debentures	9,129	9,265	9,762
Non-controlling interest	91	599	595
Equity attributable to shareholders	77,781	73,829	71,017

Condensed Consolidated Statement of Income Information

	Nine-months ended July 31, 2018	Nine-months ended July 31, 2017	Year ended October 31, 2017	Year ended October 31, 2016
<i>(in millions of Canadian dollars, except per share amounts and percentage amounts)</i>				
Net interest income	13,462	12,779	17,140	16,531
Non-interest income ¹	18,445	17,367	23,529	22,264
Total revenue ¹	31,907	30,146	40,669	38,795
Provision for credit losses ²	954	916	1,150	1,546
Insurance policyholder benefits, claims and acquisition expense	2,182	1,916	3,053	3,424
Non-interest expense ¹	16,951	16,183	21,794	20,526
Net Income	9,181	8,632	11,469	10,458
Earnings per share				
– basic	\$6.19	\$5.69	\$7.59	\$6.80
– diluted	\$6.16	\$5.67	\$7.56	\$6.78
Return on common equity (ROE) ^{3,4}	17.6%	17.2%	17.0%	16.3%

¹ Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

² Under IFRS 9, PCL relates primarily to loans, acceptances, and commitments, and also applies to all financial assets except for those classified or designated as fair value through profit or loss (FVTPL) and equity securities designated as fair value through other comprehensive income (FVOCI). Prior to the adoption of IFRS 9, PCL related only to loans, acceptances, and commitments. PCL on loans, acceptances, and commitments is comprised of PCL on impaired loans (Stage 3 PCL under IFRS 9 and PCL on impaired loans under IAS 39) and PCL on performing loans (Stage 1 and Stage 2 PCL under IFRS 9 and PCL on loans not yet identified as impaired under IAS 39). Refer to the Credit risk section of the Management's Discussion and Analysis and Note 2 of the Issuer's unaudited interim condensed consolidated financial statements in the Issuer's Third Quarter 2018 Report to Shareholders for further details.

³ This measure may not have a standardized meaning under generally accepted accounting principles (GAAP) and may not be comparable to similar measures disclosed by other financial institutions. For further details, refer to the Key performance and non-GAAP measures section of the Management's Discussion and Analysis in the Issuer's 2017 Annual Report and the Key performance and non-GAAP measures section of the Management's Discussion and Analysis in the Issuer's Third Quarter 2018 Report to Shareholders.

⁴ Average amounts are calculated using methods intended to approximate the average of the daily balances for the period. This includes Average common equity used in the calculation of ROE. For further details, refer to the Key performance and non-GAAP measures section of the Management's Discussion and Analysis in the Issuer's 2017 Annual Report and the Key performance and non-GAAP measures section of the Management's Discussion and Analysis in the Issuer's Third Quarter 2018 Report to Shareholders.

Statement of no significant or material adverse change

Since October 31, 2017, there has been no material adverse change in the prospects of the Issuer and its subsidiaries taken as a whole.

Since July 31, 2018, there has been no significant change in the financial or trading position of the Issuer and its subsidiaries taken as a whole.

Following the inclusion of SONIA in the Base Prospectus, Element C.9 of the Summary to the Programme is updated as set out below:

C.9	Description of Rights Attaching to the Notes, including Nominal Interest Rate, Interest Payment Date, Maturity Date/ Repayment Procedures, Indication of Yield and Name of Representative of Debt Note Holders:	<p>Interest: Senior Notes may be interest bearing or non-interest bearing. Interest (if any) may accrue at a fixed rate or a floating rate and may be resettable periodically. The applicable interest rate or its method of calculation may differ from time to time or be constant for any Series of Senior Notes. Senior Notes may have a maximum interest rate, a minimum interest rate, or both. The length of the interest periods for the Senior Notes may also differ from time to time or be constant for any Series of Senior Notes.</p> <p>Fixed rate notes: Fixed interest will be payable in arrear on the specified date or dates in each year.</p> <p><i>Issue specific summary:</i> [Fixed Rate Notes are not being issued] [Rate(s)] of Interest: [•] per cent. per annum payable [•] in arrear on each Interest Payment Date [in the period from and including [•] to but excluding [•]] Interest Payment Date(s): [•] in each year subject to adjustment in accordance with the Business Day Convention set out below [for payment purposes only / for payment and interest calculation purposes] [Fixed Coupon Amount(s)]: [•] per Calculation Amount [Broken Amount(s): [•] per Calculation Amount payable on [•]] Business Day Convention: [•]</p> <p>Fixed rate resettable notes: Fixed interest will be payable for each interest period up to the initial reset date and thereafter the interest rate will be periodically resettable on a specified date or dates on the basis of a specified reference rate plus a specified margin.</p> <p><i>Issue specific summary:</i> [Fixed Rate Resettable Notes are not being issued] [Rate(s) of Interest: [[•] per cent. per annum payable [•] in arrear on [•]] [and thereafter the [Mid-Swap Rate/Benchmark Gilt Rate/Reference Bond Rate] plus [•] payable on [•], the [Mid-Swap Rate] plus [•] payable on [•], [•]] [Interest Payment Date(s): [•] in each year [subject to adjustment in accordance with the Business Day Convention set out below] [for payment purposes only / for payment and interest calculation purposes]] [Fixed Coupon Amount(s): [•] per Calculation Amount [for the period up to [•]] [Broken Amount(s): [•] per Calculation Amount payable on [•]] Business Day Convention: [•]</p> <p>Floating rate notes: Floating Rate Notes will bear interest determined separately for each Series.</p> <p><i>Issue specific summary:</i> [Floating Rate Notes are not being issued]</p> <p><i>Rates of Interest:</i> [SONIA]¹ [[•] month [EURIBOR/LIBOR/CDOR /STIBOR/BBSW/CNH HIBOR/HIBOR] +/- [•] per cent. per annum payable [•] in arrear on each Interest Payment Date [in the period from and including [•] to but excluding [•]] [Specified Period(s): [•]] Interest Payment Dates: [[•] in each year, subject to adjustment in accordance with the Business Day Convention set out below] First Interest Payment Date: [•] Manner in which the Rate(s) of Interest is/are to be determined: [•] Business Day Convention: [•]</p> <p>Zero coupon notes: Zero Coupon Notes may be issued at their nominal amount or at a discount to it and will not bear interest.</p> <p><i>Issue specific summary:</i> [Zero Coupon Notes are not being issued] Accrual Yield: [•] per cent. per annum</p>
-----	---	---

¹ The “Issue Specific summary: Rates of Interest” has been updated to include “[SONIA]” before “[•] month ...” in the first line.

		<p>Reference Price: [•]</p> <p>Yield: The yield in respect of each issue of Fixed Rate Notes is calculated at the Issue Date on the basis of the compound annual rate of return if the Senior Notes were to be purchased at the Issue Price on the Issue Date and held to maturity. It is not an indication of future yield.</p> <p><i>Issue specific summary:</i></p> <p>Indication of yield: [[•] [up to (but excluding) [•]] [Not Applicable]</p> <p>Maturities: Senior Notes will have such maturities as may be agreed between the Issuer and the relevant Dealer, subject to such minimum or maximum maturities as may be allowed or required from time to time by the relevant central bank (or equivalent body) or any laws or regulations applicable to the issuer or the relevant Specified Currency</p> <p><i>Issue specific summary:</i></p> <p>Maturity Date: [•]</p> <p>Final redemption: Subject to any purchases and cancellations or early redemption, Senior Notes will be redeemed on each Maturity Date at par, except in the case of Zero Coupon Notes, when it may be redeemed at a percentage of the principal of the Senior Notes equal to at least 100 per cent. thereof.</p> <p><i>Issue specific summary:</i></p> <p>The Final Redemption Amount of the Senior Note is [[par] / [•] per Calculation Amount.]</p> <p>Early redemption: The Issuer may elect to redeem the Senior Notes prior to the Maturity Date in certain circumstances for tax reasons.</p> <p>In addition, if so specified below in the applicable Final Terms, the Senior Notes may be redeemed prior to the Maturity Date pursuant to an Issuer call option and/or an investor put option.</p> <p><i>Issue specific summary</i></p> <p>[<i>Issuer Call Option:</i> [Applicable] / [Not Applicable]</p> <p>[Optional Redemption Date(s): [•]</p> <p>Optional Redemption Amount(s): [•] per [•] in nominal amount of the Senior Notes</p> <p>If redeemable in part:</p> <p> Minimum Redemption Amount: [•] per [•] in nominal amount of the Senior Notes</p> <p> Maximum Redemption Amount: [•] per [•] in nominal amount of the Senior Notes</p> <p>Notice Period: [•]</p> <p>[<i>Investor Put Option:</i> [Applicable] [Not Applicable]</p> <p>Optional Redemption Amount: [•] per [•] in nominal amount of the Senior Notes</p> <p>Optional Redemption Amount: [•] per [•] in nominal amount of the Senior Notes</p> <p>Notice Period: [•]</p> <p>Representative of the noteholders: This part of the Element is not applicable as there is no trustee appointed to act on behalf of the Noteholders.</p>
--	--	--

Following the inclusion of SONIA in the Base Prospectus, Element D.3 of the Summary to the Programme is updated as set out below:

D.3	Key Information on the key risks that are specified to the Notes:	<p>The following is a summary of the key risks that are specific to the Senior Notes:</p> <p>Withholding tax: The Senior Notes may be subject to withholding taxes in circumstances in which the Issuer is not obliged to make gross up payments and this would result in holders receiving less interest than expected and could significantly adversely affect their return on the Senior Notes.</p> <p>The Secondary market: Senior Notes may have not established trading market when issued, and one may never develop, or may be illiquid. In such case, investors may not be able to sell their Senior Notes easily or at favourable prices.</p> <p>Exchange rate rises and exchange controls: The investment of investors whose financial activities are denominated in a currency other than the Specified Currency [or any alternative currency in which payments may be made in accordance with the Conditions] of the Senior Notes may be adversely affected by changes in exchange rates or currency appreciation, or by the imposition of exchange controls.</p> <p>Change of law: A future change in the laws of administrative practice of the governing law of the Senior Notes affects conditions drafted on the basis of such law or practice prior to the relevant change(s) and could materially adversely impact the value of the Senior Notes.</p> <p>Modifications to conditions: The conditions of the Senior Notes contain provisions which may permit their modification without the consent of all investors.</p> <p>Canadian resolution power: The Senior Notes may be subject to effective write-off or write-down under current Canadian resolution powers.</p> <p><i>Issue specific summary</i></p> <p>[Payments in alternative currency: If the Specified Currency is unavailable on the foreign exchange markets due to circumstances beyond its control, the Issuer will be entitled to satisfy its obligations in respect of payment on the Senior Notes by making payment in [●] on the basis of the spot exchange rate (the “Alternative Currency FX Rate”) or in its absence, a substitute rate determined by the Issuer or its Calculation Agent in its discretion. The Alternative Currency FX Rate or any such substitute rate may be such that the resulting Alternative Currency amount is zero and in such event no amount in the Alternative Currency will be payable.]</p> <p>[Fixed rate notes: Investment in Fixed Rate Note involves the risk that subsequent changes in market interest rates may adversely affect the value of the Fixed Rate Notes.]</p> <p>[Issuer calls: An optional redemption feature exercisable at the option of the Issuer may reduce the return on investment provided by a Senior Note compared to the return that would have been achieved had the Senior Note been redeemed at maturity and the Issuer may chose to redeem the Senior Notes at times when prevailing interest rates may be relatively low.]</p> <p>[Fixed/floating rate notes: Fixed/Floating Rate Notes may bear interest at a rate that [the Issuer may elect to] convert[s] from a fixed rate to a floating rate, or from a floating rate to a fixed rate. [The Issuer’s ability to convert the interest rate will[[This may] affect the secondary market for, and the market value of, the Senior Notes [since the Issuer may be expected to convert the rate when it is likely to result in a lower overall cost of borrowing for the Issuer] [in particular if the conversion arises at a time when the new rate produces a lower overall cost of borrowing for the Issuer]. [If the Issuer converts from a fixed rate to a floating rate, the spread on the Fixed/Floating Rate Notes may be less favourable than prevailing spreads on</p>
-----	---	--

	<p>comparable floating rate notes tied to the same reference rate. In addition, the new floating rate at any time may be lower than the rates on the Issuer's other Senior Notes. If the Issuer converts from a floating rate to a fixed rate, the fixed rate may be lower than the prevailing rates on its other Senior Notes.]]</p> <p>[Fixed rate resettable notes: A holder of Senior Notes that will be periodically reset during the term of the relevant Senior Notes is exposed to the risk of fluctuating interest rate levels and uncertain interest income.]</p> <p>[Renminbi notes: Senior Notes denominated in Renminbi are subject to additional risks; Renminbi is not completely freely convertible or transferable and there are still significant restrictions on remittance of Renminbi into and out of the People's Republic of China (excluding Hong Kong, Macao Special Administrative Region of the People's Republic of China and Taiwan) (the "PRC") which may adversely affect the liquidity of Senior Notes denominated in Renminbi; there is only limited availability of Renminbi outside the PRC, which may affect the liquidity of such Senior Notes and the Issuer's ability to source Renminbi outside the PRC to service such Senior Notes; if the Issuer is unable to source Renminbi, it may pay holders of such Senior Notes in U.S. dollars; payments in respect of Senior Notes denominated in Renminbi will only be made to investors in the manner specified under the relevant terms and conditions.]</p> <p>[Alternative currency payments: If the Senior Notes contemplate that amounts may be payable in an alternative currency in the event of certain exchange or currency related events, the value of the Senior Notes could be affected by fluctuations in the value of the currency in which they were originally due to be payable, as compared to that alternative currency. There is a risk that the exchange rate (or the exchange rates) used to determine the alternative currency amount of any such payments may significantly change (including changes due to devaluation or revaluation of the original currency) or that authorities with jurisdiction over such currencies could cause a decrease in (1) the alternative currency equivalent yield on the Senior Notes, (2) the alternative currency equivalent value of any other amount payable in respect of the Senior Notes and (3) the alternative currency equivalent market value of the Senior Notes. Therefore, there is a possibility that the alternative currency value of the Senior Notes at the time of any sale or payment, as the case may be, of the Senior Notes may be below the alternative currency value of the Senior Notes on investing, depending on the exchange rate at the time of any such sale or payment, as the case may be.]</p> <p>[SONIA: The market continues to develop in relation to SONIA as a reference rate. The market or a significant part thereof may adopt an application of SONIA that differs significantly from that set out in the Conditions and used for the Senior Notes. Interest under the Senior Notes is determined at the end of the relevant Interest Period and cannot be estimated in advance.]²</p>
--	--

² An additional paragraph entitled "[SONIA]" has been added to the end of the "Issue specific summary" and after "Alternative currency payments".

SUPPLEMENTARY OFFERING CIRCULAR

Pages 13 to 15 inclusive of this Supplement (the “**4th Supplementary Offering Circular**”) constitutes a supplement to the Offering Circular and is prepared in connection with the Programme for the Issuance of Securities established by RBC.

Terms defined in the Offering Circular have the same meaning when used in this 4th Supplementary Offering Circular. The 4th Supplementary Offering Circular is supplemental to, and shall be read in conjunction with, the Offering Circular and any other prior supplements to the Offering Circular issued by RBC (together, the “**Offering Circular**”).

NEITHER THE OFFERING CIRCULAR NOR THIS 4TH SUPPLEMENTARY OFFERING CIRCULAR TO THE OFFERING CIRCULAR HAVE BEEN REVIEWED OR APPROVED BY THE UK LISTING AUTHORITY AND THE OFFERING CIRCULAR DOES NOT CONSTITUTE A PROSPECTUS FOR THE PURPOSE OF DIRECTIVE 2003/71/EC AS AMENDED.

RBC accepts responsibility for the information in this 4th Supplementary Offering Circular. To the best of the knowledge of RBC, having taken reasonable care to ensure that such is the case, the information contained in this 4th Supplementary Offering Circular is in accordance with the facts and does not omit anything likely to affect the import of such information.

This 4th Supplementary Offering Circular is supplemental to, and should be read in conjunction with, the Offering Circular and the documents incorporated by reference therein. This 4th Supplementary Offering Circular is to be read in conjunction with the following sections of the 4th Supplementary Prospectus (as amended herein):

- (i) Documents Incorporated by Reference;
- (ii) Statement of No Significant Change;
- (iii) Amendment to Statement Regarding Governmental, Legal or Arbitration Proceedings;
- (iv) Singapore Selling Restriction; and
- (v) Sections (a) and (b) of Sterling Overnight Index Average (“SONIA”), except that the reference to page 65 shall be read as a reference to page 165,

each of which will be deemed to be incorporated by reference herein, save that references to “**Base Prospectus**” shall be deemed to be to the “**Offering Circular**”, references to “**4th Supplementary Prospectus**” shall be deemed to be to the “**4th Supplementary Offering Circular**”, references to “**Final Terms**” shall be deemed to be “**Pricing Supplement**” and references to “**Notes**” shall be deemed to be reference to “**Non PD Notes**”.

To the extent that there is any inconsistency between (a) any statement in this 4th Supplementary Offering Circular or any statement incorporated by reference into the Offering Circular by this 4th Supplementary Offering Circular and (b) any other statement in, or incorporated by reference in, the Offering Circular, the statements in (a) above will prevail.

Save as disclosed in this 4th Supplementary Offering Circular, no significant new factor, material mistake or inaccuracy relating to the information included in the Offering Circular which is capable of affecting the assessment of Non PD Notes issued under the Programme has arisen or been noted, as the case may be, since the publication of the Offering Circular.

The purpose of this 4th Supplementary Offering Circular is to also (a) update certain sections of the Offering Circular in light of regulatory developments in Singapore; and (b) update certain items of the Pricing Supplement in the Offering Circular to include references to the Sterling Overnight Index Average (“**SONIA**”).

SINGAPORE REGULATORY DEVELOPMENTS

In light of regulatory developments in Singapore, certain sections of the Offering Circular shall be updated as follows:

(a) the information set out on page 149 of the Offering Circular shall be supplemented to include the following:

“Notification under Section 309B(1)(c) of the Securities and Futures Act (Chapter 289) of Singapore (the “SFA”)

Unless otherwise stated in the Pricing Supplement, all Notes issued or to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).”

(b) the section entitled “FORM OF PRICING SUPPLEMENT” on pages 202 to 215 of the Offering Circular shall be supplemented to include the following paragraph on pages 202 of the Offering Circular after the paragraph beginning with “**PRIIPS REGULATION PROHIBITION OF SALES TO EEA RETAIL INVESTORS**”:

“[NOTIFICATION UNDER SECTION 309B(1)(C) OF THE SECURITIES AND FUTURES ACT (CHAPTER 289) OF SINGAPORE (the “SFA”) - [To insert notice if classification of the Notes is not “prescribed capital markets products”², pursuant to Section 309B of the SFA].²]

² Relevant Dealer(s) to consider whether it/they have received the necessary product classification from the Issuer prior to the launch of the offer, pursuant to Section 309B of the SFA.”

STERLING OVERNIGHT INDEX AVERAGE (“SONIA”)

The following items in the section entitled “FORM OF PRICING SUPPLEMENT” on pages 202 to 215 of the Offering Circular shall be deleted and replaced with the following:

8. Interest Basis: [[] per cent. Fixed Rate] [subject to change as indicated in paragraph 10 below]
- [SONIA] [[] month]/LIBOR/EURIBOR/CDOR/STIBOR/BBSW/CNH HIBOR/HIBOR]] [+/-][] per cent. Floating Rate] [subject to change as indicated in paragraph 10 below]
- [Fixed Rate Resettable Notes]
- [Zero Coupon]
- (further particulars specified below)
- (Further particulars specified below)*
- (N.B. If two or more of the above apply, state which are applicable and complete the relevant particulars)*

14. Floating Rate Note Provisions

(Condition 5.03)

[Applicable/Not Applicable]

(If not applicable, delete the remaining sub-paragraphs of this paragraph)

(viii) Screen Rate Determination:

[Applicable] [Not Applicable]

– Reference Rate:

[SONIA] [[] month [LIBOR] [EURIBOR] [CDOR]
[STIBOR] [BBSW] [CNH HIBOR] [HIBOR]
[]] *(Additional information is required if other,
including fallback provisions)*

– Interest Determination Date(s):

[]

(Fifth London Banking Day prior to the end of each Interest Period if SONIA, second London business day prior to start of each Interest Period if LIBOR (other than Sterling or euro LIBOR), first day of each Interest Period if Sterling LIBOR and the second TARGET2 Business day prior to start of each Interest Period if EURIBOR or euro LIBOR.)

– Relevant Screen Page:

[]

(In the case of EURIBOR, if not Reuters EURIBOR01 ensure it is on page which shows a composite rate or amend fallback provisions appropriately.)

– Relevant Time:

[] [Not Applicable]

– Reference Banks:

[] [Not Applicable]

– Relevant Financial Centre:

[] [Not Applicable]