ROYAL BANK OF CANADA
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PRICING SUPPLEMENT
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Royal Bank of Canada Trigger Autocallable Contingent Yield Notes
$5,012,000 Notes Linked to the Common Stock of Micron Technology, Inc. due on March 12, 2020

Investment Description

Trigger Autocallable Contingent Yield Notes (the "Notes") are unsecured and unsubordinated debt securities issued by Royal Bank of Canada linked to the performance of the common stock of Micron Technology, Inc. (the "Underlying"). We will pay a quarterly Contingent Coupon payment if the closing price of the Underlying on the applicable Coupon Observation Date is equal to or greater than the Coupon Barrier. Otherwise, no coupon will be paid for that quarter. We will automatically call the Notes early if the closing price of the Underlying on any Call Observation Date is equal to or greater than the Initial Price. If the Notes are called, we will pay you the principal amount of your Notes plus the Contingent Coupon for that quarter and no further amounts will be owed to you under the Notes. If the Notes are not called prior to maturity and the Final Price of the Underlying is equal to or greater than the Downside Threshold (which is the same price as the Coupon Barrier), we will pay you a cash payment at maturity equal to the principal amount of your Notes plus the Contingent Coupon for the final quarter. If the Final Price of the Underlying is less than the Downside Threshold, we will pay you less than the full principal amount, if anything, resulting in a loss on your initial investment that is proportionate to the negative performance of the Underlying over the term of the Notes, and you may lose up to 100% of your initial investment.

Investing in the Notes involves significant risks. You may lose some or all of your principal amount. The contingent repayment of principal only applies if you hold the Notes until maturity. Generally, the higher the Contingent Coupon Rate on the Notes, the greater the risk of loss on the Notes. Any payment on the Notes, including any repayment of principal, is subject to our creditworthiness. If we were to default on our payment obligations, you may not receive any amounts owed to you under the Notes and you could lose your entire investment. The Notes will not be listed on any securities exchange.

Features Key Dates

- Contingent Coupon — We will pay a quarterly Contingent Coupon payment if the closing price of the Underlying on the applicable Coupon Observation Date is equal to or greater than the Coupon Barrier. Otherwise, no coupon will be paid for the quarter.
- Automatically Callable — We will automatically call the Notes and pay you the principal amount of your Notes plus the Contingent Coupon otherwise due for that quarter if the closing price of the Underlying on any quarterly Call Observation Date is greater than or equal to the Initial Price. If the Notes are not called, investors will have the potential for downside equity market risk at maturity.
- Contingent Repayment of Principal at Maturity — If by maturity the Notes have not been called and the price of the Underlying does not close below the Downside Threshold on the Final Valuation Date, we will repay your principal amount per Note at maturity. If the price of the Underlying closes below the Downside Threshold on the Final Valuation Date, we will pay less than the principal amount, if anything, resulting in a loss on your initial investment that is proportionate to the decline in the price of the Underlying from the Trade Date to the Final Valuation Date. The contingent repayment of principal only applies if you hold the Notes until maturity. Any payment on the Notes, including any repayment of principal, is subject to our creditworthiness.

Trade Date	March 9, 2018
Settlement Date	March 14, 2018
Coupon Observation Dates[1]	Quarterly (see page 6)
Call Observation Dates[1]	Quarterly (see page 6)
Final Valuation Date[1]	March 9, 2020

Maturity Date[1] March 12, 2020

[1] Subject to postponement if a market disruption event occurs and as described under "General Terms of the Securities—Payment at Maturity" in the accompanying product prospectus supplement no. UBS-TPAOS-2.

NOTICE TO INVESTORS: THE NOTES ARE SIGNIFICANTLY RISKIER THAN CONVENTIONAL DEBT INSTRUMENTS. WE ARE NOT NECESSARILY OBLIGATED TO REPAY THE FULL PRINCIPAL AMOUNT OF THE NOTES AT MATURITY, AND THE NOTES CAN HAVE DOWNSIDE MARKET RISK SIMILAR TO THE UNDERLYING. THIS MARKET RISK IS IN ADDITION TO THE CREDIT RISK INHERENT IN PURCHASING OUR DEBT OBLIGATION. YOU SHOULD NOT PURCHASE THE NOTES IF YOU DO NOT UNDERSTAND OR ARE NOT COMFORTABLE WITH THE SIGNIFICANT RISKS INVOLVED IN INVESTING IN THE NOTES.

YOU SHOULD CAREFULLY CONSIDER THE RISKS DESCRIBED UNDER "KEY RISKS" BEGINNING ON PAGE 7 OF THIS PRICING SUPPLEMENT, UNDER "RISK FACTORS" BEGINNING ON PAGE PS-5 OF THE PRODUCT PROSPECTUS SUPPLEMENT NO. UBS-TPAOS-2 AND UNDER ''RISK FACTORS'' BEGINNING ON PAGE S-1 OF THE PROSPECTUS SUPPLEMENT BEFORE PURCHASING ANY NOTES. EVENTS RELATING TO ANY OF THOSE RISKS, OR OTHER RISKS AND UNCERTAINTIES, COULD ADVERSELY AFFECT THE MARKET VALUE OF, AND THE RETURN ON, YOUR NOTES. YOU MAY LOSE SOME OR ALL OF YOUR INITIAL INVESTMENT IN THE NOTES.

Note Offering

We are offering Trigger Autocallable Contingent Yield Notes linked to the common stock of Micron Technology, Inc. ("MU"). The Notes will be issued in minimum denominations of $10.00, and integral multiples of $10.00 in excess thereof, with a minimum investment of $1,000.00.

Underlying	Contingent Coupon Rate	Initial Price	Downside Threshold*	Coupon Barrier*	CUSIP	ISIN
Common stock of Micron Technology, Inc. (MU)	15.35%	$54.59	$32.75, which is 60.00% of the Initial Price	$32.75, which is 60.00% of the Initial Price	78013Q590	US78013Q5909

*Rounded to two decimal places.

See "Additional Information About Royal Bank of Canada and the Notes" in this pricing supplement. The Notes will have the terms specified in the prospectus dated January 8, 2016, the prospectus supplement dated January 8, 2016, product prospectus supplement no. UBS-TPAOS-2 dated January 20, 2016 and this pricing supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Notes or passed upon the accuracy or the adequacy of this pricing supplement or the accompanying prospectus, prospectus supplement and product prospectus supplement no. UBS-TPAOS-2. Any representation to the contrary is a criminal offense.

	Price to Public		Fees and Commissions(1)		Proceeds to Us	
Offering of the Notes	Total	Per Note	Total	Per Note	Total	Per Note
Notes linked to the common stock of Micron Technology, Inc. (MU)	$5,012,000.00	$10.00	$75,180.00	$0.15	$4,936,820.00	$9.85

(1) UBS Financial Services Inc., which we refer to as UBS, will receive a commission of $0.15 per $10.00 principal amount of the Notes. See "Supplemental Plan of Distribution (Conflicts of Interest)" on page 15 of this pricing supplement.

The initial estimated value of the Notes as of the date of this document is $9.7829 per $10 in principal amount, which is less than the price to public. The actual value of the Notes at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. We describe our determination of the initial estimated value under "Key Risks," "Supplemental Plan of Distribution (Conflicts of Interest)" and "Structuring the Notes" below.

The Notes will not constitute deposits insured under the Canada Deposit Insurance Corporation Act or by the United

States Federal Deposit Insurance Corporation or any other Canadian or United States government agency or instrumentality.

UBS Financial Services Inc. RBC Capital Markets, LLC

Additional Information About Royal Bank of Canada and the Notes

You should read this pricing supplement together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016, relating to our senior global medium-term notes, Series G, of which these Notes are a part, and the more detailed information contained in product prospectus supplement no. UBS-TPAOS-2 dated January 20, 2016. This pricing supplement, together with the documents listed below, contains the terms of the Notes and supersedes all other prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, fact sheets, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in "Risk Factors" in the accompanying product prospectus supplement no. UBS-TPAOS-2, as the Notes involve risks not associated with conventional debt securities.

If the terms discussed in this pricing supplement differ from those discussed in the product prospectus supplement no. UBS-TPAOS-2, the prospectus supplement, or the prospectus, the terms discussed herein will control. Please note in particular that several defined terms in the product prospectus supplement are replaced in this document with different terms:

- instead of "Starting Price" in the product prospectus supplement, the term "Initial Price" is used in this document;
- instead of "Ending Price" in the product prospectus supplement, the term "Final Price" is used in this document;
- instead of "Trigger Price" in the product prospectus supplement, the term "Downside Threshold" is used in this document;
- instead of "Underlying Equity" in the product prospectus supplement, the term "Underlying" is used in this document; and
- instead of "final Observation Date" in the product prospectus supplement, the term "Final Valuation Date" is used in this document.

You may access these on the SEC website at www.sec.gov as follows (or if such address has changed, by reviewing our filing for the relevant date on the SEC website):

- Product prospectus supplement no. UBS-TPAOS-2 dated January 20, 2016:
https://www.sec.gov/Archives/edgar/data/1000275/000114036116048191/form424b5.htm
- Prospectus supplement dated January 8, 2016:
http://www.sec.gov/Archives/edgar/data/1000275/000121465916008811/p14150424b3.htm
- Prospectus dated January 8, 2016:
http://www.sec.gov/Archives/edgar/data/1000275/000121465916008810/j18160424b3.htm

As used in this pricing supplement, "we," "us" or "our" refers to Royal Bank of Canada.

Investor Suitability

The Notes may be suitable for you if, among other considerations:

- You fully understand the risks inherent in an investment in the Notes, including the risk of loss of your entire initial investment.
- You can tolerate a loss of all or a substantial portion of your investment and are willing to make an investment that may have the same downside market risk as an investment in the Underlying.
- You believe the closing price of the Underlying will be equal to or greater than the Coupon Barrier on most or all of the Coupon Observation Dates (including the Final Valuation Date).
- You are willing to make an investment whose return is limited to the Contingent Coupon payments, regardless of any potential appreciation of the Underlying, which could be significant.
- You can tolerate fluctuations in the price of the Notes prior to maturity that may be similar to or exceed the downside price fluctuations of the Underlying.
- You are willing to invest in Notes for which there may be little or no secondary market and you accept that the secondary market will depend in large part on the price, if any, at which RBC Capital Markets, LLC, which we refer to as "RBCCM," is willing to purchase the Notes.
- You are willing to invest in the Notes based on the Contingent Coupon Rate specified on the cover page of this pricing supplement.
- You do not seek guaranteed current income from this investment and are willing to forgo dividends paid on the Underlying.
- You are willing to invest in securities that may be called early and you are otherwise willing to hold such securities to maturity.
- You are willing to assume our credit risk for all payments under the Notes, and understand that if we default on our obligations, you may not receive any amounts due to you, including any repayment of principal.

The Notes may not be suitable for you if, among other considerations:

- You do not fully understand the risks inherent in an investment in the Notes, including the risk of loss of your entire initial investment.
- You cannot tolerate a loss on your investment and require an investment designed to provide a full return of principal at maturity.
- You are not willing to make an investment that may have the same downside market risk as an investment in the Underlying.
- You believe that the price of the Underlying will decline during the term of the Notes and is likely to close below the Coupon Barrier on most or all of the Coupon Observation Dates and below the Downside Threshold on the Final Valuation Date.
- You seek an investment that participates in the full appreciation in the price of the Underlying or that has unlimited return potential.
- You cannot tolerate fluctuations in the price of the Notes prior to maturity that may be similar to or exceed the downside price fluctuations of the Underlying.
- You are unwilling to invest in the Notes based on the Contingent Coupon Rate specified on the cover page of this pricing supplement.
- You seek guaranteed current income from this investment or prefer to receive the dividends paid on the Underlying.
- You are unable or unwilling to hold securities that may be called early, or you are otherwise unable or unwilling to hold such securities to maturity or you seek an investment for which there will be an active secondary market for the Notes.
- You are not willing to assume our credit risk for all payments under the Notes, including any repayment of principal.

The suitability considerations identified above are not exhaustive. Whether or not the Notes are a suitable investment for you will depend on your individual circumstances, and you should reach an investment decision only after you and your investment, legal, tax, accounting, and other advisers have carefully considered the suitability of an investment in the Notes in light of your particular circumstances. You should also review carefully the "Key Risks" beginning on page 7 of this pricing supplement and "Risk Factors" in the accompanying product prospectus supplement no. UBS-TPAOS-2

for risks related to an investment in the Notes. In addition, you should review carefully the section below, "Information About the Underlying," for more information about the Underlying.

Final Terms of the Notes[1]

Issuer:	Royal Bank of Canada
Principal Amount per Note:	$10.00 per Note
Term:	2 years, if not previously called
Underlying:	The common stock of Micron Technology, Inc.
Closing Price:	On any trading day, the last reported sale price of the Underlying on the principal national securities exchange in the U.S. on which it is listed for trading, as determined by the calculation agent.
Initial Price:	The closing price of the Underlying on the Trade Date, as set forth on the cover page of this pricing supplement.
Final Price:	The closing price of the Underlying on the Final Valuation Date.
Contingent Coupon:	If the closing price of the Underlying is equal to or greater than the Coupon Barrier on any Coupon Observation Date, we will pay you the Contingent Coupon applicable to that Coupon Observation Date. If the closing price of the Underlying is less than the Coupon Barrier on any Coupon Observation Date, the Contingent Coupon applicable to that Coupon Observation Date will not accrue or be payable and we will not make any payment to you on the relevant Contingent Coupon Payment Date. The Contingent Coupon will be a fixed amount based upon equal quarterly installments at the Contingent Coupon Rate, which will be a per annum rate as set forth below.

Contingent Coupon payments on the Notes are not guaranteed. We will not pay you the Contingent Coupon for any Coupon Observation Date on which the closing price of the Underlying is less than the Coupon Barrier.

Contingent Coupon Rate:	15.35% per annum (3.8375% per quarter).
Coupon Barrier:	$32.75, which is 60.00% of the Initial Price, rounded to two decimal places (as may be adjusted in the case of certain adjustment events as described under “General Terms of the Securities—Anti-dilution Adjustments” in the product prospectus supplement). The Coupon Barrier equals the Downside Threshold.
Downside Threshold:	$32.75, which is 60.00% of the Initial Price, rounded to two decimal places (as may be adjusted in the case of certain adjustment events as described under “General Terms of the Securities—Anti-dilution Adjustments” in the product prospectus supplement). The Downside Threshold equals the Coupon Barrier.
Automatic Call Feature:	The Notes will be called automatically if the closing price of the Underlying on any Call Observation Date (set forth on page 6) is greater than or equal to the Initial Price. If the Notes are called, we will pay you on the corresponding coupon payment date (which will be the “Call Settlement Date”) a cash payment per Note equal to the principal amount per Note plus the applicable Contingent Coupon payment otherwise due on that day (the “Call Settlement Amount”). No further amounts will be owed to you under the Notes.
Payment at Maturity:	If the Notes are not called and the Final Price is equal to or greater than the Downside Threshold and the Coupon Barrier, we will pay you a cash payment per Note on the maturity date equal to $10.00 plus the Contingent Coupon otherwise due on the maturity date. If the Notes are not called and the Final Price is less than the Downside Threshold, we will pay you a cash payment on the maturity date of less than the principal amount, if anything, resulting in a loss on your initial investment that is proportionate to the negative underlying return, equal to:

[1] Terms used in this pricing supplement, but not defined herein, shall have the meanings ascribed to them in the product prospectus supplement.

$10.00 + ($10.00 × underlying return)

Underlying Return: $\frac{\text{Final Price} - \text{Initial Price}}{\text{Initial Price}}$

Investment Timeline

Trade Date:	The Initial Price of the Underlying was observed. The Downside Threshold and Coupon Barrier were determined. The Contingent Coupon Rate was set.
Quarterly:	If the closing price of the Underlying is equal to or greater than the Coupon Barrier on any Coupon Observation Date, we will pay you a Contingent Coupon payment on the applicable coupon payment date. The Notes will be called if the closing price of the Underlying on any Call Observation Date is equal to or greater than the Initial Price. If the Notes are called, we will pay you a cash payment per Note equal to $10 plus the Contingent Coupon otherwise due on that date.
Maturity Date:	The Final Price of the Underlying is observed on the Final Valuation Date. If the Notes have not been called and the Final Price is equal to or greater than the Downside Threshold (and the Coupon Barrier), we will repay the principal amount equal to $10 per Note plus the Contingent Coupon otherwise due on the maturity date. If the Notes have not been called and the Final Price is less than the Downside Threshold, we will repay less than the principal amount, if anything, resulting in a loss on your initial investment proportionate to the decline of the Underlying, for an amount equal to: $10 + ($10 × underlying return) per Note

INVESTING IN THE NOTES INVOLVES SIGNIFICANT RISKS. YOU MAY LOSE SOME OR ALL OF YOUR PRINCIPAL AMOUNT. ANY PAYMENT ON THE NOTES, INCLUDING ANY REPAYMENT OF PRINCIPAL, IS SUBJECT TO OUR CREDITWORTHINESS. IF WE WERE TO DEFAULT ON OUR PAYMENT OBLIGATIONS, YOU MAY NOT RECEIVE ANY AMOUNTS OWED TO YOU UNDER THE NOTES AND YOU COULD LOSE YOUR ENTIRE INVESTMENT.

Coupon Observation Dates and Coupon Payment Dates*

Coupon Observation Dates	Coupon Payment Dates
June 11, 2018[1]	June 14, 2018[2]
September 10, 2018[1]	September 13, 2018[2]
December 10, 2018[1]	December 13, 2018[2]
March 11, 2019[1]	March 14, 2019[2]
June 10, 2019[1]	June 13, 2019[2]
September 9, 2019[1]	September 12, 2019[2]
December 9, 2019[1]	December 12, 2019[2]
March 9, 2020[3]	March 12, 2020[4]

(1) These Coupon Observation Dates are also Call Observation Dates.
(2) These Coupon Payment Dates are also Call Settlement Dates.
(3) This is also the Final Valuation Date.
(4) This is also the maturity date.
* Expected. Subject to postponement if a market disruption event occurs as described under “General Terms of the Securities—Payment at Maturity” in the accompanying product prospectus supplement no. UBS-TPAOS-2.

Key Risks

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Underlying. These risks are explained in more detail in the "Risk Factors" section of the accompanying product prospectus supplement no. UBS-TPAOS-2. We also urge you to consult your investment, legal, tax, accounting and other advisors before investing in the Notes.

Risks Relating to the Notes Generally

- Risk of Loss at Maturity — The Notes differ from ordinary debt securities in that we will not necessarily repay the full principal amount of the Notes at maturity. If the Notes are not called, we will repay you the principal amount of your Notes in cash only if the Final Price of the Underlying is greater than or equal to the Downside Threshold, and will only make that payment at maturity. If the Notes are not called and the Final Price is less than the Downside Threshold, you will lose some or all of your initial investment in an amount proportionate to the decline in the price of the Underlying.
- The Contingent Repayment of Principal Applies Only at Maturity — If the Notes are not automatically called, you should be willing to hold your Notes to maturity. If you are able to sell your Notes prior to maturity in the secondary market, if any, you may have to do so at a loss relative to your initial investment, even if the price of the Underlying is above the Downside Threshold.
- You May Not Receive any Contingent Coupons — Royal Bank of Canada will not necessarily make periodic Contingent Coupon payments on the Notes. If the closing price of the Underlying on a Coupon Observation Date is less than the Coupon Barrier, we will not pay you the Contingent Coupon applicable to that Coupon Observation Date. If the closing price of the Underlying is less than the Coupon Barrier on each of the Coupon Observation Dates, we will not pay you any Contingent Coupons during the term of, and you will not receive a positive return on, your Notes. Generally, this non-payment of the Contingent Coupon coincides with a period of greater risk of principal loss on your Notes. Accordingly, if we do not pay the Contingent Coupon on the maturity date, you will incur a loss of principal, because the Final Price will be less than the Downside Threshold.
- The Call Feature and the Contingent Coupon Feature Limit Your Potential Return — The return potential of the Notes is limited to the pre-specified Contingent Coupon Rate, regardless of the appreciation of the Underlying. In addition, the total return on the Notes will vary based on the number of Call Observation Dates on which the Contingent Coupon becomes payable prior to maturity or an automatic call. Further, if the Notes are called due to the automatic call feature, you will not receive any Contingent Coupons or any other payment in respect of any Call Observation Dates after the applicable Call Settlement Date. Since the Notes could be called as early as the first Call Observation Date, the total return on the Notes could be minimal. If the Notes are not called, you may be subject to the full downside performance of the Underlying even though your potential return is limited to the Contingent Coupon Rate. Generally, the longer the Notes are outstanding, the less likely it is that they will be automatically called due to the decline in the price of the Underlying and the shorter time remaining for the price of the Underlying to recover. As a result, the return on an investment in the Notes could be less than the return on a direct investment in the Underlying or on a similar security that allows you to participate in the appreciation of the price of the Underlying.
- The Contingent Coupon Rate Per Annum Payable on the Notes Will Reflect in Part the Volatility of the Underlying, and May Not Be Sufficient to Compensate You for the Risk of Loss at Maturity — "Volatility" refers to the frequency and magnitude of changes in the price of the Underlying. The greater the volatility of the Underlying, the more likely it is that the price of that equity could close below the Downside Threshold on the Final Valuation Date. This risk will generally be reflected in a higher Contingent Coupon Rate for the Notes than the rate payable on our conventional debt securities with a comparable term. However, while the Contingent Coupon Rate will be set on the Trade Date, the Underlying's volatility can change significantly over the term of the Notes, and may increase. The price of the Underlying could fall sharply as of the Final Valuation Date, which could result in a significant loss of your principal.
- The Notes Are Subject to Reinvestment Risk — The Notes will be called automatically if the closing price of the Underlying is equal to or greater than the Initial Price on any Call Observation Date. In the event that the Notes are called prior to maturity, there is no guarantee that you will be able to reinvest the proceeds from an investment in the Notes at a comparable rate of return for a similar level of risk. To the extent you are able to reinvest your proceeds in an investment comparable to the Notes, you will incur transaction costs and the original issue price for such an

investment is likely to include certain built in costs such as dealer discounts and hedging costs.

- The Notes Are Subject to Our Credit Risk — The Notes are subject to our credit risk, and our credit ratings and credit spreads may adversely affect the market value of the Notes. Investors are dependent on our ability to pay all amounts due on the Notes, and therefore investors are subject to our credit risk and to changes in the market's view of our creditworthiness. Any decline in our credit ratings or increase in the credit spreads charged by the market for taking our credit risk is likely to adversely affect the value of the Notes. If we were to default on our payment obligations, you may not receive any amounts owed to you under the Notes and you could lose your entire investment.

An Investment in the Notes Is Subject to Single Stock Risk – The price of the Underlying can rise or fall sharply due to factors specific to that Underlying and its issuer, such as stock price volatility, earnings, financial conditions, corporate, industry and regulatory developments, management changes and decisions and other events, as well as general market factors, such as general stock market volatility and levels, interest rates and economic and political conditions. You, as an investor in the Notes, should make your own investigation into the Underlying issuer and the Underlying. For additional information about the Underlying and its issuer, please see "Information about the Underlying" in this pricing supplement and the Underlying issuer's SEC filings referred to in those sections. We urge you to review financial and other information filed periodically by the Underlying issuer with the SEC.

The Initial Estimated Value of the Notes Is Less than the Price to the Public — The initial estimated value that is set forth on the cover page of this document, which is less than the public offering price you pay for the Notes and does not represent a minimum price at which we, RBCCM or any of our other affiliates would be willing to purchase the Notes in any secondary market (if any exists) at any time. If you attempt to sell the Notes prior to maturity, their market value may be lower than the price you paid for them and the initial estimated value. This is due to, among other things, changes in the price of the Underlying, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to public of the underwriting discount, and our estimated profit and the costs relating to our hedging of the Notes. These factors, together with various credit, market and economic factors over the term of the Notes, are expected to reduce the price at which you may be able to sell the Notes in any secondary market and will affect the value of the Notes in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Notes prior to maturity may be less than the price to public, as any such sale price would not be expected to include the underwriting discount and our estimated profit and the costs relating to our hedging of the Notes. In addition, any price at which you may sell the Notes is likely to reflect customary bid-ask spreads for similar trades. In addition to bid-ask spreads, the value of the Notes determined for any secondary market price is expected to be based on a secondary market rate rather than the internal borrowing rate used to price the Notes and determine the initial estimated value. As a result, the

secondary market price will be less than if the internal borrowing rate was used. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.

- Our Initial Estimated Value of the Notes Is an Estimate Only, Calculated as of the Time the Terms of the Notes Were Set — The initial estimated value of the Notes is based on the value of our obligation to make the payments on the Notes, together with the mid-market value of the derivative embedded in the terms of the Notes. See "Structuring the Notes" below. Our estimate is based on a variety of assumptions, including our credit spreads, expectations as to dividends, interest rates and volatility, and the expected term of the Notes. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Notes or similar securities at a price that is significantly different than we do.

The value of the Notes at any time after the Trade Date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Notes in any secondary market, if any, should be expected to differ materially from the initial estimated value of your Notes and the amount that may be paid at maturity.

- Owning the Notes Is Not the Same as Owning the Underlying — The return on your Notes may not reflect the return you would realize if you actually owned the Underlying. As a holder of the Notes, you will not have voting rights or rights to receive dividends or other distributions or other rights that holders of the Underlying, and any such dividends will not be incorporated in the determination of the underlying return.
- You Will Not Have Any Shareholder Rights and Will Have No Right to Receive Any Shares of the Underlying at Maturity — Investing in the Notes will not make you a holder of any shares of the Underlying. Neither you nor any other holder or owner of the Notes will have any voting rights, any right to receive dividends or other distributions, or any other rights with respect to the Underlying or such other securities.
- There Is No Affiliation Between the Underlying Issuer and Us, UBS and Our Respective Affiliates, and We Are Not Responsible for Any Disclosure by that Issuer — We, UBS and our respective affiliates are not affiliated with the Underlying issuer. However, we, UBS and our respective affiliates may currently, or from time to time in the future engage in business with the Underlying issuer. Nevertheless, neither we nor our affiliates assume any responsibilities for the accuracy or the completeness of any information about the Reference Stock and the Underlying issuer. You, as an investor in the Notes, should make your own investigation into the Underlying and the Underlying issuer for your Notes. The Underlying issuer is not involved in this offering and has no obligation of any sort with respect to your Notes. The Underlying issuer has no obligation to take your interests into consideration for any reason, including when taking any corporate actions that might affect the value of your Notes.
- Historical Prices of the Underlying Should Not Be Taken as an Indication of its Future Prices During the Term of the Notes — The trading prices of the Underlying will determine the value of the Notes at any given time. However, it is impossible to predict whether the price of the Underlying will rise or fall, trading prices of the Underlying will be influenced by complex and interrelated political, economic, financial and other factors that can affect the Underlying Issuer, and therefore, the price of the Underlying.
- There Can Be No Assurance that the Investment View Implicit in the Notes Will Be Successful — It is impossible to predict whether and the extent to which the price of the Underlying will rise or fall. The closing price of the Underlying will be influenced by complex and interrelated political, economic, financial and other factors that affect the Underlying. You should be willing to accept the downside risks of owning equities in general and the Underlying in particular, and the risk of losing some or all of your initial investment.
- Lack of Liquidity — The Notes will not be listed on any securities exchange. RBCCM intends to offer to purchase the Notes in the secondary market, but is not required to do so. Even if there is a secondary market, it may not provide enough liquidity to allow you to trade or sell the Notes easily. Because other dealers are not likely to make a secondary market for the Notes, the price at which you may be able to trade your Notes is likely to depend on the price, if any, at which RBCCM is willing to buy the Notes.
- Potential Conflicts — We and our affiliates play a variety of roles in connection with the issuance of the Notes, including hedging our obligations under the Notes. In performing these duties, the economic interests of the calculation agent and other affiliates of ours are potentially adverse to your interests as an investor in the Notes.
- Potentially Inconsistent Research, Opinions or Recommendations by RBCCM, UBS or Their Affiliates — RBCCM, UBS, and our respective affiliates may publish research, express opinions or provide recommendations as to the Underlying that are inconsistent with investing in or holding the Notes, and which may be revised at any time. Any

such research, opinions or recommendations could affect the value of the Underlying, and therefore, the market value of the Notes.

- Uncertain Tax Treatment — Significant aspects of the tax treatment of an investment in the Notes are uncertain. You should consult your tax adviser about your tax situation.
- Potential Royal Bank of Canada and UBS Impact on Price — Trading or transactions by Royal Bank of Canada, UBS or our respective affiliates in the Underlying, or in futures, options, exchange-traded funds or other derivative products on the Underlying may adversely affect the market value of the Underlying, the closing price of the Underlying, and, therefore, the market value of the Notes.
- Many Economic and Market Factors Will Impact the Value of the Notes — In addition to the closing price of the Underlying on any trading day, the value of the Notes will be affected by a number of economic and market factors that may either offset or magnify each other, including:
  - the actual and expected volatility of the price of the Underlying;
  - the time remaining to maturity of the Notes;
  - the dividend rate on the Underlying;
  - interest and yield rates in the market generally;
  - a variety of economic, financial, political, regulatory or judicial events;
  - the occurrence of certain events relating to the Underlying that may or may not require an adjustment to the terms of the Notes; and
  - our creditworthiness, including actual or anticipated downgrades in our credit ratings.

Some or all of these factors influenced the terms of the Notes at issuance and will influence the price you will receive if you choose to sell the Notes prior to maturity. The impact of any of the factors set forth above may enhance or offset some or all of any change resulting from

another factor or factors. You may have to sell the Notes at a substantial discount from the principal amount if the price of the Underlying is at, below or not sufficiently above, its Downside Threshold.

- The Anti-Dilution Protection for the Underlying Is Limited — The calculation agent will make adjustments to the Initial Price, Downside Threshold and Coupon Barrier for certain events affecting the shares of the Underlying. However, the calculation agent will not be required to make an adjustment in response to all events that could affect the Underlying. If an event occurs that does not require the calculation agent to make an adjustment, the value of the Notes and the payments on the Notes may be materially and adversely affected.

Hypothetical Examples

Hypothetical terms only. Actual terms may vary. See the cover page for actual offering terms.

The following examples are hypothetical and provided for illustrative purposes only. They do not purport to be representative of every possible scenario concerning increases or decreases in the price of the Underlying relative to its Initial Price. Royal Bank of Canada cannot predict the Final Price of the Underlying. You should not take these examples as an indication or assurance of the expected performance of the Underlying. The numbers appearing in the examples and tables below have been rounded for ease of analysis. The following examples and tables illustrate the Payment at Maturity or upon an automatic call per Note on a hypothetical offering of the Notes, based on the following hypothetical assumptions (actual terms for the Notes are specified on the cover page of this pricing supplement):

Principal Amount:	$10.00
Term:	Approximately 2 years
Hypothetical Initial Price*:	$100.00
Contingent Coupon Rate:	15.35% per annum (or 3.8375% per quarter)
Contingent Coupon**:	$0.38375 per quarter
Coupon Observation Dates:	Quarterly
Call Observation Dates:	Quarterly
Hypothetical Downside Threshold*:	$60.00 (which is 60% of the Initial Price)
Hypothetical Coupon Barrier*:	$60.00 (which is 60% of the Initial Price)

* Not the actual Initial Price, Coupon Barrier or Downside Threshold applicable to the Notes. The actual Initial Price, Coupon Barrier and Downside Threshold are set forth on the cover page of this pricing supplement.

** Contingent Coupon payments, if payable, will be paid in arrears in equal quarterly installments during the term of the Notes unless earlier called.

Scenario #1: Notes Are Called on the First Coupon Observation Date.

Date	Closing Price	Payment (per Note)
First Coupon Observation Date	$110.00 (at or above Coupon Barrier and Initial Price)	$10.38375 (Call Settlement Amount)
	Total Payment:	$10.38375 (3.8375% return)

Since the Notes are called on the first Coupon Observation Date, Royal Bank of Canada will pay you on the Call Settlement Date a total of $10.38375 per Note, reflecting your principal amount plus the applicable Contingent Coupon, for a 3.8375% total return on the Notes. No further amount will be owed to you under the Notes.

Scenario #2: Notes Are Called on the Third Coupon Observation Date.

Date	Closing Price	Payment (per Note)
First Coupon Observation Date	$85.00 (at or above Coupon Barrier; below Initial Price)	$0.38375 (Contingent Coupon – not called)
Second Coupon Observation Date	$65.00 (at or above Coupon Barrier; below Initial Price)	$0.38375 (Contingent Coupon – not called)
Third Coupon Observation Date	$105.00 (at or above Initial Price)	$10.38375 (Call Settlement Amount)
	Total Payment:	$11.15125 (11.5125% return)

Since the Notes are called on the third Coupon Observation Date, we will pay you on the Call Settlement Date a total of $10.38375 per Note, reflecting your principal amount plus the applicable Contingent Coupon. When added to the Contingent Coupon payments of $0.7675 received in respect of prior Coupon Observation Dates, we will have paid you a total of $11.15125 per Note, for an 11.5125% total return on the Notes. No further amount will be owed to you under the Notes.

Scenario #3: Notes Are NOT Called and the Final Price of the Underlying Is at or Above the Downside Threshold.

Date	Closing Price	Payment (per Note)

First Coupon Observation Date	$95.00 (at or above Coupon Barrier; below Initial Price)	$0.38375 (Contingent Coupon – not called)
Second Coupon Observation Date	$59.50 (below Coupon Barrier)	$0.00 (not called)
Third to Seventh Coupon Observation Dates	Various (below Coupon Barrier; below Initial Price)	$0.00 (Contingent Coupon not payable – Notes not called)
Final Valuation Date	$75.00 (at or above Downside Threshold and Coupon Barrier; below Initial Price)	$10.38375 (Payment at Maturity)
	Total Payment:	$10.7675 (7.675% return)

At maturity, we will pay you a total of $10.38375 per Note, reflecting your principal amount plus the applicable Contingent Coupon. When added to the Contingent Coupon payments of $0.38375 received in respect of prior Coupon Observation Dates, we will have paid you a total of $10.7675 per Note, for a 7.675% total return on the Notes.

Scenario #4: Notes Are NOT Called and the Final Price of the Underlying Is Below the Downside Threshold

Date	Closing Price	Payment (per Note)
First Coupon Observation Date	$95.00 (at or above Coupon Barrier; below Initial Price)	$0.38375 (Contingent Coupon – not called)
Second Coupon Observation Date	$75.00 (at or above Coupon Barrier; below Initial Price)	$0.38375 (Contingent Coupon – not called)
Third to Seventh Coupon Observation Dates	Various (below Coupon Barrier; below Initial Price)	$0.00 (Contingent Coupon not payable – Notes not called)
Final Valuation Date	$40.00 (below Downside Threshold and Coupon Barrier)	$10.00 + [$10.00 × underlying return] = $10.00 + [$10.00 × -60%] = $10.00 - $6.00 = $4.00 (Payment at Maturity)
	Total Payment:	$4.7675 (-52.325% return)

Since the Notes are not called and the Final Price of the Underlying is below the Downside Threshold, we will pay you at maturity $4.00 per Note. When added to the Contingent Coupon payments of $0.7675 received in respect of prior Coupon Observation Dates, we will have paid you $4.7675 per Note, for a loss on the Notes of 52.325%.

The Notes differ from ordinary debt securities in that, among other features, we are not necessarily obligated to repay the full amount of your initial investment. If the Notes are not called on any Call Observation Date, you may lose some or all of your initial investment. Specifically, if the Notes are not called and the Final Price is less than the Downside Threshold, you will lose 1% (or a fraction thereof) of your principal amount for each 1% (or a fraction thereof) that the underlying return is less than zero.

Any payment on the Notes, including payments in respect of an automatic call, Contingent Coupon or any repayment of principal provided at maturity, is dependent on our ability to satisfy our obligations when they come due. If we are unable to meet our obligations, you may not receive any amounts due to you under the Notes.

What Are the Tax Consequences of the Notes?

U.S. Federal Income Tax Consequences

The following, together with the discussion of U.S. federal income tax in the accompanying product prospectus supplement, prospectus supplement, and prospectus, is a general description of the material U.S. federal income tax consequences relating to an investment in the Notes. The following summary is not complete and is qualified in its entirety by the discussion under the section entitled "Supplemental Discussion of U.S. Federal Income Tax Consequences" in the accompanying product prospectus supplement no. UBS-TPAOS-2, the section entitled "Certain Income Tax Consequences" in the accompanying prospectus supplement, and the section entitled "Tax Consequences" in the accompanying prospectus, which you should carefully review prior to investing in the Notes. The discussions below and in the accompanying product prospectus supplement, prospectus supplement, and prospectus, do not address the tax consequences applicable to holders subject to Section 451(b) of the Code.

In the opinion of our counsel, Morrison & Foerster LLP, it would generally be reasonable to treat the Notes as a callable pre-paid cash-settled contingent income-bearing derivative contract linked to the Underlying for U.S. federal income tax purposes, and the terms of the Notes require a holder and us (in the absence of a change in law or an administrative or judicial ruling to the contrary) to treat the Notes for all tax purposes in accordance with such characterization. Although the U.S. federal income tax treatment of the Contingent Coupons is uncertain, we intend to take the position, and the following discussion assumes, that such Contingent Coupons (including any coupon paid on or with respect to the call or maturity date) constitute taxable ordinary income to a U.S. holder at the time received or accrued in accordance with the holder's regular method of accounting. If the Notes are treated as described above, subject to the potential application of the "constructive ownership" rules under Section 1260 of the Internal Revenue Code, a U.S. holder should generally recognize capital gain or loss upon the call, sale or maturity of the Notes in an amount equal to the difference between the amount a holder receives at such time (other than amounts properly attributable to any Contingent Coupon, which would be taxed, as described above, as ordinary income) and the holder's tax basis in the Notes. Capital gain recognized by an individual U.S. holder is generally taxed at preferential rates where the property is held for more than one year and is generally taxed at ordinary income rates where the property is held for one year or less. The deductibility of capital losses is subject to limitations.

Alternative tax treatments are also possible and the Internal Revenue Service might assert that a treatment other than that described above is more appropriate. In addition, the Internal Revenue Service has released a notice that may affect the taxation of holders of the Notes. According to the notice, the Internal Revenue Service and the Treasury Department are actively considering whether the holder of an instrument such as the Notes should be required to accrue ordinary income on a current basis. It is not possible to determine what guidance they will ultimately issue, if any. It is possible, however, that under such guidance, holders of the Notes will ultimately be required to accrue income currently and this could be applied on a retroactive basis. The Internal Revenue Service and the Treasury Department are also considering other relevant issues, including whether additional gain or loss from such instruments should be treated as ordinary or capital and whether the special "constructive ownership rules" of Section 1260 of the Internal Revenue Code might be applied to such instruments. Holders are urged to consult their tax advisors concerning the significance, and the potential impact, of the above considerations.

Individual holders that own "specified foreign financial assets" may be required to include certain information with respect to such assets with their U.S. federal income tax return. You are urged to consult your own tax advisor regarding such requirements with respect to the Notes.

Under Section 871(m) of the Internal Revenue Code, a "dividend equivalent" payment is treated as a dividend from sources within the United States. Such payments generally would be subject to a 30% U.S. withholding tax if paid to a non-U.S. holder. Under U.S. Treasury Department regulations, payments (including deemed payments) with respect to equity-linked instruments ("ELIs") that are "specified ELIs" may be treated as dividend equivalents if such specified ELIs reference an interest in an "underlying security," which is generally any interest in an entity taxable as a corporation for U.S. federal income tax purposes if a payment with respect to such interest could give rise to a U.S. source dividend. However, the IRS has issued guidance that states that the U.S. Treasury Department and the IRS intend to amend the effective dates of the U.S. Treasury Department regulations to provide that withholding on dividend equivalent payments will not apply to specified ELIs that are not delta-one instruments and that are issued before January 1, 2019. Based on our determination that the Notes are not delta-one instruments, non-U.S. holders should not be subject

to withholding on dividend equivalent payments, if any, under the Notes. However, it is possible that the Notes could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the Underlying or the Notes, and following such occurrence the Notes could be treated as subject to withholding on dividend equivalent payments. Non-U.S. holders that enter, or have entered, into other transactions in respect of the Underlying or the Notes should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the Notes and their other transactions. If any payments are treated as dividend equivalents subject to withholding, we (or the applicable withholding agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

The Notes are not intended for purchase by any investor that is not a United States person, as that term is defined for U.S. federal income tax purposes, and the underwriters will not make offers of the Notes to any such investor.

Canadian Federal Income Tax Consequences

For a discussion of the material Canadian federal income tax consequences relating to an investment in the Notes, please see the section entitled “Tax Consequences—Canadian Taxation” in the accompanying prospectus, which you should carefully review prior to investing in the Notes.

Information About the Underlying

Included on the following pages is a brief description of the Underlying. This information has been obtained from publicly available sources. Set forth below is a table that provides the quarterly high, low and period-end closing prices for the Underlying. We obtained the closing price information set forth below from the Bloomberg Professional® service ("Bloomberg") without independent verification. You should not take the historical prices of the Underlying as an indication of future performance.

The Underlying is registered under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Companies with securities registered under the Exchange Act are required to file financial and other information specified by the SEC periodically. Information filed by the Underlying with the SEC can be reviewed electronically through a web site maintained by the SEC. The address of the SEC's website is http://www.sec.gov. Information filed with the SEC by the issuer of the Underlying under the Exchange Act can be located by reference to its SEC Central Index Key ("CIK") number provided below. In addition, information filed with the SEC can be inspected and copied at the Public Reference Section of the SEC, 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Copies of this material can also be obtained from the Public Reference Section, at prescribed rates. Information from outside sources is not incorporated by reference in, and should not be considered part of, this pricing supplement or any accompanying prospectus or prospectus supplement. We have not independently verified the accuracy or completeness of the information contained in outside sources.

Micron Technology, Inc.

According to publicly available information, Micron Technology, Inc., through its subsidiaries, manufactures and markets dynamic random access memory chips (DRAMs), static random access memory chips (SRAMs), flash memory, semiconductor components, and memory modules.

Information filed by the company with the SEC under the Exchange Act can be located by reference to its SEC CIK number: 0000723125. The company's common stock is listed on Nasdaq under the ticker symbol "MU."

Historical Information

The following table sets forth the quarterly high, low and period-end closing prices for the Underlying, based on daily closing prices, as reported by Bloomberg L.P. The historical performance of the Underlying should not be taken as an indication of its future performance during the term of the Notes.

Quarter Begin	Quarter End	Quarterly Closing High	Quarterly Closing Low	Quarterly Period-End Close
1/1/2013	3/31/2013	$10.04	$6.63	$9.98
4/1/2013	6/30/2013	$14.34	$9.10	$14.33
7/1/2013	9/30/2013	$17.62	$12.47	$17.47
10/1/2013	12/31/2013	$23.14	$16.56	$21.76
1/1/2014	3/31/2014	$25.49	$20.67	$23.66
4/1/2014	6/30/2014	$32.95	$21.13	$32.95
7/1/2014	9/30/2014	$34.64	$29.68	$34.26
10/1/2014	12/31/2014	$36.49	$27.03	$35.01
1/1/2015	3/31/2015	$34.75	$26.57	$27.13
4/1/2015	6/30/2015	$29.52	$18.73	$18.84
7/1/2015	9/30/2015	$20.12	$14.06	$14.98
10/1/2015	12/31/2015	$19.16	$13.66	$14.16
1/1/2016	3/31/2016	$14.82	$9.69	$10.47
4/1/2016	6/30/2016	$14.05	$9.56	$13.76
7/1/2016	9/30/2016	$18.00	$11.73	$17.78
10/1/2016	12/31/2016	$23.30	$16.62	$21.92
1/1/2017	3/31/2017	$28.97	$21.71	$28.90
4/1/2017	6/30/2017	$32.50	$26.57	$29.86
7/1/2017	9/30/2017	$39.33	$27.49	$39.33
10/1/2017	12/31/2017	$49.68	$39.37	$41.12
1/1/2018	3/9/2018*	$55.22	$39.40	$54.59

* This pricing supplement includes information for the first calendar quarter of 2018 for the period from January 1, 2018 through March 9, 2018. Accordingly, the “Quarterly Closing High,” “Quarterly Closing Low” and “Quarterly Period-End Close” data indicated are for this shortened period only and do not reflect complete data for the first calendar quarter of 2018.

The graph below illustrates the performance of the Underlying from December 30, 2009* to March 9, 2018, based on the Initial Price of $54.59, which was its closing price on March 9, 2018. The solid line represents the Coupon Barrier and Downside Threshold of $32.75 which is equal to 60.00% of the closing price on March 9, 2018 (rounded to two decimal places).

n Coupon Barrier / Downside Threshold = 60.00%

HISTORIC PERFORMANCE IS NOT AN INDICATION OF FUTURE PERFORMANCE.

Source: Bloomberg L.P. We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets.

* The common stock of Micron Technology, Inc. began trading publicly on December 30, 2009.

Supplemental Plan of Distribution (Conflicts of Interest)

We have agreed to indemnify UBS and RBCCM against liabilities under the Securities Act of 1933, as amended, or to contribute payments that UBS and RBCCM may be required to make relating to these liabilities as described in the prospectus supplement and the prospectus. We have agreed that UBS Financial Services Inc. may sell all or a part of the Notes that it will purchase from us to investors or to its affiliates at the price indicated on the cover of this pricing supplement.

Subject to regulatory constraints and market conditions, RBCCM intends to offer to purchase the Notes in the secondary market, but it is not required to do so.

We or our affiliates may enter into swap agreements or related hedge transactions with one of our other affiliates or unaffiliated counterparties in connection with the sale of the Notes and RBCCM and/or an affiliate may earn additional income as a result of payments pursuant to the swap or related hedge transactions. See "Use of Proceeds and Hedging" in the accompanying product prospectus supplement no. UBS-TPAOS-2.

We will deliver the Notes on a date that is greater than two business days following the trade date. Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the Notes more than two business days prior to the original issue date will be required to specify alternative settlement arrangements to prevent a failed settlement.

The value of the Notes shown on your account statement may be based on RBCCM's estimate of the value of the Notes if RBCCM or another of our affiliates were to make a market in the Notes (which it is not obligated to do). That estimate will be based upon the price that RBCCM may pay for the Notes in light of then prevailing market conditions, our creditworthiness and transaction costs. For a period of approximately 6 months after the issue date of the Notes, the value of the Notes that may be shown on your account statement may be higher than RBCCM's estimated value of the Notes at that time. This is because the estimated value of the Notes will not include the underwriting discount and our hedging costs and profits; however, the value of the Notes shown on your account statement during that period may be a higher amount, reflecting the addition of the underwriting discount and our estimated costs and profits from hedging the Notes. Any such excess is expected to decrease over time until the end of this period. After this period, if RBCCM repurchases your Notes, it expects to do so at prices that reflect their estimated value. This period may be reduced at RBCCM's discretion based on a variety of factors, including but not limited to, the amount of the Notes that we repurchase and our negotiated arrangements from time to time with UBS.

For additional information as to the relationship between us and RBCCM, please see the section "Plan of Distribution—Conflicts of Interest" in the prospectus dated January 8, 2016.

No Prospectus (as defined in Directive 2003/71/EC (as amended, the "Prospectus Directive")) will be prepared in connection with the Notes. Accordingly, the Notes may not be offered to the public in any member state of the European Economic Area (the "EEA"), and any purchaser of these Notes who subsequently sells any of these Notes in any EEA member state must do so only in accordance with the requirements of the Prospectus Directive, as implemented in that member state.

The Notes are not intended to be offered, sold or otherwise made available to, and should not be offered, sold or otherwise made available to, any retail investor in the EEA. For these purposes, the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe the Notes, and a "retail investor" means a person who is one (or more) of: (a) a retail client, as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or (b) a customer, within the meaning of Insurance Distribution Directive 2016/97/EU, as amended, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (c) not a qualified investor as defined in the Prospectus Directive. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared, and therefore, offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

Structuring the Notes

The Notes are our debt securities, the return on which is linked to the performance of the Underlying. As is the case for all of our debt securities, including our structured notes, the economic terms of the Notes reflect our actual or perceived creditworthiness at the time of pricing. In addition, because structured notes result in increased operational, funding and liability management costs to us, we typically borrow the funds under these Notes at a rate that is more favorable to us than the rate that we might pay for a conventional fixed or floating rate debt security of comparable maturity. Using this relatively lower implied borrowing rate rather than the secondary market rate is a factor that resulted in a higher initial estimated value of the Notes at the time their terms are set than if the secondary market rate was used. Unlike the estimated value included on the cover of this document, any value of the Notes determined for purposes of a secondary market transaction may be based on a different borrowing rate, which may result in a lower value for the Notes than if our initial internal borrowing rate were used.

In order to satisfy our payment obligations under the Notes, we may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) on the issue date with RBCCM or one of our other subsidiaries. The terms of these hedging arrangements take into account a number of factors, including our creditworthiness, interest rate movements, the volatility of the Underlying, and the tenor of the Notes. The economic terms of the Notes and their initial estimated value depend in part on the terms of these hedging arrangements.

The lower implied borrowing rate is a factor that reduced the economic terms of the Notes to you. The initial offering price of the Notes also reflects the underwriting commission and our estimated hedging costs. These factors result in the initial estimated value for the Notes on the Trade Date being less than their public offering price. See “Key Risks—The Initial Estimated Value of the Notes Is Less than the Price to the Public” above.

Terms Incorporated in Master Note

The terms appearing above under the caption “Final Terms of the Notes” and the provisions in the accompanying product prospectus supplement no. UBS-TPAOS-2 dated January 20, 2016 under the caption “General Terms of the Securities” are incorporated into the master note issued to DTC, the registered holder of the Notes.

Validity of the Notes

In the opinion of Norton Rose Fulbright Canada LLP, the issue and sale of the Notes has been duly authorized by all necessary corporate action of the Bank in conformity with the Indenture, and when the Notes have been duly executed, authenticated and issued in accordance with the Indenture and delivered against payment therefor, the Notes will be validly issued and, to the extent validity of the Notes is a matter governed by the laws of the Province of Ontario or Québec, or the laws of Canada applicable therein, and will be valid obligations of the Bank, subject to equitable remedies which may only be granted at the discretion of a court of competent authority, subject to applicable bankruptcy, to rights to indemnity and contribution under the Notes or the Indenture which may be limited by applicable law; to insolvency and other laws of general application affecting creditors' rights, to limitations under applicable limitations statutes, and to limitations as to the currency in which judgments in Canada may be rendered, as prescribed by the Currency Act (Canada). This opinion is given as of the date hereof and is limited to the laws of the Provinces of Ontario and Québec and the federal laws of Canada applicable thereto. In addition, this opinion is subject to customary assumptions about the Trustee's authorization, execution and delivery of the Indenture and the genuineness of signatures and certain factual matters, all as stated in the letter of such counsel dated January 8, 2016, which has been filed as Exhibit 5.1 to Royal Bank's Form 6-K filed with the SEC dated January 8, 2016.

In the opinion of Morrison & Foerster LLP, when the Notes have been duly completed in accordance with the Indenture and issued and sold as contemplated by the prospectus supplement and the prospectus, the Notes will be valid, binding and enforceable obligations of Royal Bank, entitled to the benefits of the Indenture, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith). This opinion is given as of the date hereof and is limited to the laws of the State of New York. This opinion is subject to customary assumptions about the Trustee's authorization, execution and delivery of the Indenture and the genuineness of signatures and to such counsel's reliance on the Bank and other sources as to certain factual matters, all as stated in the legal opinion dated January 8, 2016, which has been filed as Exhibit 5.2 to the Bank's Form 6-K dated January 8, 2016.