U.S. DOLLAR-CHF SWAP AGREEMENT
DATED AS OF January 15, 2014

This U.S. Dollar-Swiss Franc swap agreement ("Swap Agreement") is between the Federal Reserve Bank of New York, acting at the direction of the Federal Open Market Committee ("FRBNY"), and the Swiss National Bank ("SNB") (together, the "Parties") and is dated as of January 15, 2014 and takes effect from January 17, 2014 (the "Effective Date").

WHEREAS, the Parties wish to convert their existing temporary arrangement to purchase and subsequently repurchase Swiss Francs ("CHF") and U.S. Dollars ("USD") from each other to facilitate the functioning of financial markets and provide liquidity in USD into a standing arrangement.

NOW THEREFORE, the Parties agree to the following Swap Agreement and that the implementation of this Swap Agreement shall be governed by the terms and conditions set forth herein:

1. Commitments by the Parties to Purchase and Repurchase Currency

   a. The SNB agrees to sell CHF to the FRBNY and to purchase USD from the FRBNY by means of a spot transaction, with a simultaneous agreement by the SNB to sell USD to the FRBNY and to purchase CHF from the FRBNY on the maturity date of such swap transaction (the "Maturity Date") by means of a forward transaction.

   b. The purchases and the subsequent repurchases under this Swap Agreement shall be referred to collectively as "Swap Transactions" and individually as a "Swap Transaction".

   c. The Parties agree, at such times as they mutually agree, to enter into Swap Transactions provided that (i) the FRBNY must receive at least one (1) Business Day's (defined below) prior notice before the proposed Value Date (defined below) of a proposed Swap Transaction (except for any overnight Swap Transaction, for which the FRBNY must receive notice by 8:00 a.m. New York time on the day on which the SNB wishes to enter into any overnight Swap Transaction) and (ii) all Swap Transactions will have a maximum duration of 88 days or as otherwise agreed upon by the Parties. The Parties may agree to waive or modify either or both of these conditions (i) and (ii).
d. The term “Value Date” will mean the day on which the FRBNY advances USD to the SNB.

c. The term “Business Day” will mean a day (other than a Saturday or Sunday) on which banks are open for business in New York.

2. Establishment of FRBNY Account on the Books of the SNB

a. For the purposes of implementing this Swap Agreement, the SNB will open or has opened an account in the name of the FRBNY (the “FRBNY Account”), which account shall be used solely in connection with the implementation of this Swap Agreement.

b. No payment instructions shall be executed in connection with the FRBNY Account other than those executed in connection with the implementation of this Swap Agreement.

c. No intra-day or overnight credit shall be granted by the SNB in respect of the FRBNY Account.

3. Establishment of SNB Account on the Books of the FRBNY

a. For the purposes of implementing this Swap Agreement, the FRBNY will open or has opened an account in the name of the SNB (the “SNB Account”), which account shall be used solely in connection with the implementation of this Swap Agreement and for the transfer of USD received under this Swap Agreement.

b. No payment instructions shall be executed in connection with the SNB Account other than those executed in connection with the implementation of this Swap Agreement and for the transfer of USD received under this Swap Agreement.

c. No intra-day or overnight credit shall be granted by the FRBNY in respect of the SNB Account.

4. Exchange Rate and Fee Determination

a. The USD/CHF exchange rate (the “Exchange Rate”) that shall apply to (i) each purchase of USD and CHF under this Swap Agreement, and (ii) each repurchase of USD and CHF under this Swap Agreement, shall be based on the prevailing market spot exchange rate as mutually agreed upon by the Parties. The same exchange rate (i.e., the rate of the spot leg) shall be applied to both the spot and forward legs of the same Swap Transaction.
b. The SNB shall pay a fee to the FRBNY in respect of USD purchased by it under each Swap Transaction. Except as otherwise agreed upon by the Parties, the fee will be a USD amount equal to the USD Amount (defined below) multiplied by a rate (the “FRBNY Rate”) (rounded to 4 digits after the decimal point) to be agreed by the Parties at the initiation of a Swap Transaction (the “Fee”). The Fee shall be calculated on a 360-day basis on the actual number of days from, and including, the Value Date to, but excluding, the Maturity Date. On the Maturity Date, the Fee shall be paid by the SNB to the FRBNY in USD, and the FRBNY will debit the Fee from the SNB Account.

c. There shall be no interest or fee payable by the FRBNY in respect of any portion of any Swap Transaction. The FRBNY shall hold the CHF portion of such Swap Transaction at the SNB in the non-interest bearing FRBNY Account.

5. Transaction Procedures

a. At such time as either Party may desire to initiate a Swap Transaction, the Parties will agree on the following terms of each Swap Transaction by means mutually agreed upon by both Parties.

   i) amount of USD to be purchased by the SNB (the “USD Amount”) and, based on the applicable Exchange Rate, the amount of CHF to be purchased by the FRBNY (the “CHF Amount”);
   ii) Value Date;
   iii) Exchange Rate;
   iv) FRBNY Rate;
   v) Maturity Date; and
   vi) Fee (calculated in accordance with Section 4(b) above).

b. Once the Parties have agreed on the terms described in Section 5(a), the Parties shall confirm their agreement without delay by means of a SWIFT message or if SWIFT is not available by means mutually agreed upon by the Parties.

c. On the Value Date, the USD Amount shall be credited to the SNB Account, and the CHF Amount shall be credited to the FRBNY Account.

d. On the Maturity Date, the USD Amount plus any Fee shall be repaid by the SNB to the FRBNY through the SNB Account.
c. On the Maturity Date, the CHF Amount, without any return thereon, shall be repaid by the FRBNY to the SNB through the FRBNY Account.

f. Each Party shall provide the other Party with a statement of account with respect to every movement on the other Party’s account in relation to this Swap Agreement.

6. Rollover and Set-off

a. **Rollover.** In the event that the SNB does not repay in full the USD Amount and Fee due under a Swap Transaction on the Maturity Date, the Parties agree to roll over any shortfall plus any Fee owing in respect of the shortfall into a new overnight Swap Transaction (“Rollover Swap Transaction”) with a USD Amount equal to the shortfall plus any Fee owing in respect of the shortfall. The portion of the maturing Swap Transaction that is not repaid shall be cancelled and replaced by such Rollover Swap Transaction, and the Rollover Swap Transaction shall be a Swap Transaction under this Swap Agreement. In such case, the SNB shall credit the CHF-equivalent amount of such shortfall (plus any Fee owing in respect of the shortfall) to the FRBNY Account as soon as possible and no later than the next day on which banks are open for business in Zurich. The SNB grants FRBNY authority to invoke a Rollover Swap Transaction on its behalf to cover any shortfall of maturity (and Fee) payments on any given day. The additional drawdown for the Rollover Swap Transaction will not exceed the total amount (and Fee) maturing on that day. The Exchange Rate and the FRBNY Rate for any Rollover Swap Transaction shall be the same respective rates as the rates on the maturing Swap Transaction that experienced the shortfall. All amounts due under a Rollover Swap Transaction will be paid on the maturity of the Rollover Swap Transaction.

b. **Setoff.** Notwithstanding Section 6(a), if at any time the SNB fails to fulfil its payment obligations under this Swap Agreement with respect to a particular Swap Transaction on the applicable Maturity Date, the FRBNY is authorized to set off any obligations that it may owe to the SNB with respect to such Swap Transaction against the corresponding CHF held by the FRBNY in respect of such Swap Transaction in the FRBNY Account pursuant to Section 5(c). The Parties shall use the prevailing market rate (as reasonably determined by the FRBNY) applicable on the same date as any set-off calculation to be performed.
7. Warranties

a. **Authority.** Except as otherwise provided herein, each of the Parties warrants and represents that it has the full power and authority to enter into and perform its obligations under this Swap Agreement.

b. **Covenant to Inform.** In the event there is any change in law, act or other change of fact or circumstance as a result of which one of the Parties is not able to perform all of its obligations under this Swap Agreement, such Party shall inform the other Party as soon as reasonably practicable of such change in law, act or other change of fact or circumstance and the steps that it plans to take in response.

c. **Repetition.** On each occasion that a Swap Transaction is entered into under this Swap Agreement, the warranties set out in this Section 7 shall be deemed to be repeated.

8. Termination

a. The Parties may, at any time, mutually agree to terminate any Swap Transaction or any portion of any Swap Transaction entered into under this Swap Agreement prior to the Maturity Date for that Swap Transaction. In case of any such early termination of a Swap Transaction, the amounts payable at the early maturity of the Swap Transaction shall be adjusted, as agreed between the SNB and the FRBNY, and such adjusted amounts shall be confirmed without delay by means of a SWIFT message.

b. The Parties may, at any time, mutually agree to terminate this Swap Agreement or either Party may unilaterally terminate this Swap Agreement with 6 months' prior written notice to the other Party.

c. At such time that this Swap Agreement is terminated for any reason, the terms and conditions of this Swap Agreement and any outstanding Swap Transaction shall continue to apply until all amounts owed by either Party under this Swap Agreement have been repaid in full.

9. Communications

a. All communication shall be in English, unless the Parties otherwise agree in writing. Any notice, request, document or other communication submitted by a Party under this Swap Agreement shall be in the form of a record (including a telephone call recorded by the Party making the call), shall refer to this Swap Agreement, and shall be deemed fully
given or sent when delivered or made to the other Party in accordance with the contact
details that will be provided separately by each Party.

b. These contact details may be changed by a Party upon written notice (including by e-
mail) to the other Party.

10. Recording

The Parties agree that each may electronically record all telephone conversations between
them with respect to this Swap Agreement.

11. Survival of Covenants

All covenants, agreements and warranties made herein shall survive after the execution
and delivery of this Swap Agreement and shall remain in full force and effect until repayment in
full of all amounts owed pursuant to this Swap Agreement.

12. Counterparts and Effective Date

a. This Swap Agreement may be executed in counterparts, each of which when so executed
and delivered shall be an original, but all of which together shall constitute but one and
the same instrument.

b. This Swap Agreement replaces and supersedes the Swap Agreement between the Parties
dated as of May 10, 2010, as amended from time to time, and shall become effective as of
the Effective Date.
IN WITNESS WHEREOF, this Swap Agreement is signed and executed by the authorized representatives of the Parties as of the Effective Date.

FEDERAL RESERVE BANK OF NEW YORK

By: Simon M. Potter
Title: Executive Vice President
Date: January 14, 2014

SWISS NATIONAL BANK

By: Fritz Zurbrügg
Title: Member of the Governing Board
Date: 

By: Dewet Moser
Title: Alternate Member of the Governing Board
Date: 
IN WITNESS WHEREOF, this Swap Agreement is signed and executed by the authorized representatives of the Parties as of the Effective Date.

FEDERAL RESERVE BANK OF NEW YORK

By: Simon M. Potter
Title: Executive Vice President
Date:

SWISS NATIONAL BANK

By: Fritz Zurbrügg
Title: Member of the Governing Board
Date: 15.1.19

By: Dewet Moser
Title: Alternate Member of the Governing Board
Date: 15.1.19