



International Swaps and Derivatives Association, Inc.

Disclosure Annex for Interest Rate Transactions

This Annex supplements and should be read in conjunction with the General Disclosure Statement. NOTHING IN THIS ANNEX AMENDS OR SUPERSEDES THE EXPRESS TERMS OF ANY TRANSACTION BETWEEN YOU AND US OR ANY RELATED GOVERNING DOCUMENTATION. Accordingly, descriptions in this Annex of the operation of Rates Transactions (as defined below) and the consequences of various events are in all cases subject to the actual terms of a Rates Transaction executed between you and us and its governing documentation (whether or not such qualification is expressly stated).

An interest rate is a measure, typically stated as a percentage per annum, of the cost of borrowing funds in a specified currency for a stated period of time (often referred to as the “**designated maturity**”). We refer to Transactions in which the Underliers are interest rates as “**Rates Transactions**” and to each specific interest rate that will serve as an Underlier as a “**reference rate.**” For example, a reference rate may be specified by referring to a particular trading screen of a financial information provider or to a government publication, such as Federal Reserve Statistical Release H.15. The definition of the reference rate may include a “**fallback**” method of determining the relevant interest rate if the named source fails to provide it at the relevant times, such as use of an alternative source or a determination based on quotations requested by the calculation agent for inter-bank borrowing rates.

The terms of a Rates Transaction may incorporate standard definitions published by industry bodies, annexes thereto and other market standard terms, which may in turn be amended or customized pursuant to the terms of the Rates Transaction and its governing documentation. Before entering into a Rates Transaction, you should obtain and review carefully any such materials incorporated by reference as their content could materially affect your rights and obligations under the Rates Transaction, its value and its appropriateness for your particular objectives.

Reference Rates

There is a wide range of reference rates for Rates Transactions. You should understand the methodology, characteristics and limitations of the reference rate selected for each Rates Transaction and consider carefully whether it is appropriate in light of your objectives for entering into the Rates Transaction.

A reference rate may be compiled by an industry association, such as the British Bankers Association in the case of the London Inter-bank Offered Rate (“**LIBOR**”), a government agency or central bank, or determined by the calculation agent designated under a Rates Transaction. Reference rates differ according to the particular type of borrowing cost that a rate is designed to measure, its methodology of compilation and applicable fallbacks. In certain Rates Transactions, the calculation agent may be authorized or required to make a

determination that a reference rate or source is not representative of market conditions, or is otherwise flawed, and may designate an alternative reference rate or source.

In some cases, rates may be compiled from submissions of borrowing costs by contributing financial institutions. You should be aware that submissions may or may not be based on actual borrowing transactions or executable bids or offers and that the compiling body may not be able to audit submissions for their accuracy or completeness. The values of compiled rates can be affected by the particular circumstances of the submitting institutions, the financial markets in which they operate and the methodology of computation. Important factors in assessing the potential that a reference rate may be susceptible to distortion or manipulation include:

- computational procedures used by the compiling body to reduce the impact of potentially unrepresentative data, such as requiring a minimum number of submissions and the rejection of outlying data;
- conflicts of interest that may affect the submitting institutions or the compiling body;
- the information the compiling body publicly discloses, which may or may not accurately reflect all relevant information available to the compiling body; and
- governance of the compiling body, whether it is subject to regulatory oversight and the nature of such oversight.

The compiling body may make certain information relevant to this assessment publicly available, and we urge you to consider such information carefully. If we or an affiliate make submissions that are used to determine a reference rate and also act as principal in Rates Transactions that use the reference rate as an Underlier, then we face an inherent conflict of interest.

In other cases, reference rates may be derived from quoted prices or yields of fixed income securities or interest rate swaps. Such rates may be affected by supply and demand conditions for particular securities, government and private company decisions on the issuance of securities, and the functioning of and degree of participation in auctions and remarketing processes.

An industry or government body that defines and compiles a reference rate may make methodological or other changes that could change the value of the reference rate, including changes related to the method by which the reference rate is calculated, the criteria for eligibility of securities or borrowers, or the timing for publication of the reference rate. In addition, the compiling body may alter, discontinue or suspend calculation or dissemination of the reference rate (in which case a fallback method of determining the reference rate may apply, if specified in the Rates Transaction). Any of the foregoing actions could adversely affect the Transaction Economics of a Rates Transaction. Compiling bodies and the institutions that make submissions in the reference rate determination process have no obligation to consider your interests in calculating, revising or discontinuing any reference rate.

Regulatory initiatives concerning LIBOR may result in a change in the compiling body, the discontinuance of certain rates and/or other modifications, not all of which can be currently foreseen. You should consider how the reference rate definition selected for a Rates Transaction provides for such eventualities.

Terms of Rates Transactions

The detailed terms of each Rates Transaction, including reference rates, will determine the timing and amount of payments and other rights and obligations. A common feature of many but not all Rates Transactions is that payment obligations are defined in terms of a reference rate applied to a “**notional amount**” over an accrual or “**calculation period**.” For example, in its simplest form an interest rate swap is a transaction where one party agrees to make periodic payments to the other party of amounts accrued at one reference rate (e.g., a fixed rate) on the notional amount over a calculation period in exchange for payments by the other party accrued on the notional amount at another reference rate (e.g., a floating rate, such as LIBOR with a designated maturity equal to the length of the calculation period). Other types of Rates Transactions are described below under “Additional Considerations for Specific Product Types”. Besides the reference rate, notional amount and calculation periods, other terms with which you should be familiar when you review any proposed Rates Transaction (which terms may vary even among Rates Transactions of the same type that trade in the same markets) may include:

- reset dates (i.e., dates during the term of a Rates Transaction on which a floating reference rate is measured and reset);
- the time period between the trade date and the date (often referred to as the “effective date”) on which the first calculation period begins;
- day count fractions;
- whether the calculation periods and payment dates of the two parties coincide, and whether under the terms of a Rates Transaction the calculations or payments are netted (i.e., subtracted arithmetically so that only the difference is payable by the party owing the larger amount);
- business day conventions;
- compounding conventions (which may apply if reset dates occur more frequently than payment dates);
- discounting factors (which may apply, or be implicit in stated figures, if amounts are paid prior to the end of a calculation period);
- the addition of a “spread” to the reference rate, including a spread that may vary depending on market conditions;

- changes in the notional amount during the term of a Rates Transaction, such as scheduled changes specified in the terms of an “amortizing swap” or “accreting swap”, or periodic adjustments under a “mark-to-market currency swap” to maintain a constant market value of a notional amount when measured in a different currency;
- other features, including options, that may (a) modify the value of a reference rate, such as barriers, multipliers, caps, floors or collars, (b) define payments based on the difference between a rate source and a specified level or on the number of days on which a reference rate is within or outside a specified range, or (c) trigger or terminate aspects of the Rates Transaction;
- circumstances under which the calculation agent may be required or permitted to override a rate source or designate a successor source; and
- specific fallbacks that apply when a rate source is not available.

In some cases, a Rates Transaction may contain optional early termination provisions that require a cash settlement. These rights allow a party to terminate a Rates Transaction in whole or in part on one or more dates prior to the end of its scheduled term. Upon early termination, a cash settlement amount may be determined and become payable to the party for whom the Rates Transaction is in-the-money. Depending on the terms of the Rates Transaction, the cash settlement amount may be determined by the calculation agent based on market quotations or as the estimated replacement cost for payments and rights that are extinguished upon termination. In some cases, the cash settlement amount may be defined by specifying a computation to be applied to an observed par swap rate (i.e., the fixed rate prevailing in the market for a swap, the floating leg of which has specified material economic characteristics that are comparable to the swap for which the cash settlement amount is being determined), as reported by a specified source. (See “Reference Rates” above regarding rate sources generally). A similar determination of a cash settlement amount may apply if a Rates Transaction includes “mandatory early termination” provisions. In such Rates Transactions, the mandatory early termination date occurs (subject to any applicable conditions) prior to the end of the stated term. Consequently, the stated term will enter into the determination of the cash settlement amount, even though the Rates Transaction will not remain outstanding after the mandatory early termination date. If you enter into a Rates Transaction under which your counterparty has an optional early termination right that requires cash settlement or a Rates Transaction that includes mandatory early termination provisions, you should assess the potential magnitude of termination payments and your ability to pay them at the appropriate time.

In other cases, a Rates Transaction may contain optional early termination provisions that allow one party to terminate the swap early without a cash settlement, with the result that the party for whom the Rates Transaction is in-the-money would lose the value of the Rates Transaction. If you enter into a Rates Transaction with a counterparty that has such an optional early termination right, you should assess the potential magnitude of the in-the-money amount you risk losing. See Section III.J -- “Option Transactions present special considerations” -- in the General Disclosure Statement.

No assurance that Rates Transactions are tailored to your hedging objectives

In some cases, you may contemplate entering into a Rates Transaction in order to hedge or mitigate interest rate exposures related to a particular borrowing or debt issuance, an anticipated transaction or as part of a general asset and liability management program. This may include, for example, entering into a fixed-for-floating interest rate swap to fix your interest costs in connection with a floating rate loan or other borrowing. The success of such a strategy will depend on the detailed terms of the Rates Transaction and the relevant loan agreement, bond indenture or debt instrument, as well as future conditions that may affect your ability to access markets, conditions affecting your lenders or liquidity providers and future changes in interest rates, exchange rates, yield curves and other market and economic factors.

Mismatches in the timing and amount of payments between a Rates Transaction and a specific loan agreement, bond indenture or other debt instrument could occur due to differences in the definitions of the reference rates governing the Rates Transaction and the debt instrument (including the use of different rate sources or the same rate source with different fallback provisions) or differences in other payment terms and conventions, such as the day count fraction, reset dates, designated maturities and business day conventions for payment dates.

Basis risk is the risk that the rate or yield of the asset or liability that you wish to hedge does not correlate perfectly with the reference rate selected under a Rates Transaction. Basis risk will generally be present unless the same reference rate is an explicit contractual term of both the Rates Transaction and the hedged asset or liability. Even then, other terms in the related debt instrument may cause actual borrowing costs to diverge from the reference rate. For example, loan agreements typically contain yield protection and/or increased costs provisions to compensate lenders for increased costs or reduced revenue associated with carrying the loan, including as a result of changes in taxes, withholding, reserves, assessments, and capital requirements.

Basis risk also may arise from differences in the liquidity characteristics of your debt obligations or your creditworthiness as compared to borrowers or issuers whose debt is used to establish a reference rate. Furthermore, historically stable relationships between different reference rates may break down. Examples observed during the recent financial crisis include divergences between LIBOR and overnight indexed swap (“OIS”) rates, as well as changes in the relationship between LIBOR and reference rates for tax-exempt debt. The relationship between reference rates for taxable and tax-exempt instruments may be affected by changes in, or uncertainty about, future marginal tax rates and the tax treatment of comparable securities or other securities viewed by investors as substitutes.

If the asset or liability hedged by a Rates Transaction is prepaid or redeemed prior to maturity or amortizes at a faster rate than the notional amount of the Rates Transaction, then you may find yourself overhedged (i.e., having interest rate risk under the Rates Transaction that is no longer offset by a corresponding principal amount of the asset or liability). You should consider your ability and potential costs to terminate a Rates Transaction under such circumstances, and whether the excess notional amount remaining under a Rates Transaction

might violate loan covenants or other contractual restrictions (such as investment guidelines) to which you or your assets are subject. In some circumstances, the cost of terminating a Rates Transaction may cause you to forego the flexibility afforded to you in the prepayment, call or redemption provisions of your debt instruments. In addition, a Rates Transaction may limit your ability to obtain release of collateral upon prepayment of a liability (for example, if you intend to refinance an asset with another lender) if such collateral also secures a Rates Transaction.

Additional Considerations for Specific Product Types

The following is a discussion of certain material risks, terms and characteristics of some common types of Rates Transactions. The categories employed below are illustrative only, and are intended to assist you in understanding key features of certain prospective Rates Transactions. The discussion should not be viewed as a comprehensive description of any particular Rates Transaction that may be under discussion between you and us. Because nomenclature is neither standardized nor sufficiently descriptive to capture all important transaction features and variations, a particular Rates Transaction may have additional or different risks, terms and characteristics than described below, even if it is referred to by one of the following category names.

Interest rate swaps

- *Fixed-for-floating*: In a fixed-for-floating interest rate swap, one party makes periodic payments based on a fixed rate that is agreed upon at the execution of the swap, while the other party makes payments based on a floating rate that may be reset periodically. From the perspective of a fixed rate payer, an increase in the overall level of fixed interest rates of the relevant tenors in the swap market (e.g., an upward shift of the relevant yield curve) will generally cause the swap to increase in value, because the fixed rate payer's contractually specified fixed rate obligations will be lower than the fixed rate then prevailing in the market. Conversely, if the overall level of fixed interest rates falls, the value of the swap to the fixed rate payer will generally decline. From the perspective of the floating rate payer, the corresponding value changes will be reversed.
- *Overnight indexed swap*: The term "overnight indexed swap" ("**OIS swap**") generally refers to a fixed-for-floating swap in which the floating reference rate is an overnight interbank rate. Because the interval between payments under an OIS swap typically encompasses multiple daily observations of the overnight rate, the payment computation must take these multiple values into account. Various methods are possible, including arithmetic averaging and daily compounding with various compounding conventions. The compounding conventions may be included within the definition of the reference rate, or may be explicitly provided for in the swap confirmation.
- *Single currency basis swap*: In a single currency basis swap, periodic payments are exchanged based on two floating reference rates, both denominated in the same currency. The value of a basis swap generally is sensitive to changes in the relationship between the two floating rates, which in turn depends on market conditions affecting the supply and demand for funds or debt instruments in markets relevant for each reference rate. If the

floating rates have different designated maturities, the value of the basis swap will be particularly sensitive to the shape of the relevant yield curve, and changes in its steepness or an inversion of the yield curve may result in significant losses.

- *Cross currency rate swap*: In a cross-currency rate swap, periodic payments are exchanged based on either two floating reference rates, one floating rate and one fixed rate, or two fixed rates, each with a corresponding notional amount denominated in a different currency. Notional amounts are exchanged on the effective date and the maturity date, although in some transactions notional amounts are not exchanged, creating a coupon-only cross currency rate swap. The value of a cross-currency rate swap will depend on interest rates and yield curves in each currency, as well as the spot and forward exchange rates between the two currencies. Cross-currency rate swaps generally involve an exchange of different currencies, in which case settlement risk will be present unless the parties have arranged an effective mechanism for payment-versus-payment settlement. See “Settlement Risk” in the Disclosure Annex for Foreign Exchange Transactions, published by the International Swaps and Derivatives Associations, Inc. (“**FX Disclosure Annex**”). In some cases, the terms of a cross-currency rate swap may provide that amounts calculated in one or both of the notional currencies are converted into a settlement currency (which may be one of the notional currencies or may be a different currency) and netted. See the FX Disclosure Annex generally regarding considerations relevant to payments in foreign currencies and calculations based on exchange rates, including in particular the discussion of disruption events and disruption fallbacks.
- *Other valuation considerations*: The value of an interest rate swap may be determined by reference to a series of forward rates for each future calculation period. A forward rate can be viewed as representing the currently prevailing fixed forward price of a particular future floating rate payment. Forward rates may be observable market rates in some cases, or may be interpolated from observed rates or implied by zero-coupon interest rates with tenors corresponding to the beginning and end of the relevant calculation period. In general, the portion of the value of an interest rate swap that is attributable to the exchange of payments on a given payment date may be determined by discounting a payment of the forward rate to present value at an appropriate discount rate (which may be based on a different yield curve than used to derive the forward rates) and comparing this amount to the discounted present value of the corresponding fixed rate payment, in the case of a fixed-for-floating swap, or the corresponding payment of the forward rate for the other floating leg, in the case of a basis swap. Consequently, the value will depend not only on the current level of the interest rates of the same designated maturity as the floating reference rate, but also on the entire yield curve up to the maturity date of the swap. The value may be affected by changes in the shape of the yield curve as well as the overall level of interest rates. For certain types of swaps under which payment flows do not correspond in timing or amount to payments on the traded instruments that define the reference rates, valuations may depend on volatilities of forward rates. The pricing of such swaps is inherently more complex than the pricing of simpler interest rate swaps and generally requires use of models that describe fluctuations of the yield curve or approximated methods such as convexity adjustments. Examples of such swaps include arrears-setting swaps (i.e., in which a floating rate is set at the end of a

calculation period and applied retroactively) and constant maturity swaps (i.e., in which the floating rate is a par swap rate of constant maturity).

Forward rate agreements

A forward rate agreement (“**FRA**”) generally is an agreement to exchange payments based on the difference between (A) a fixed rate that is agreed upon at execution and (B) a floating rate that will be observed at some future date. If the FRA specifies a settlement date prior to the end of the accrual period for the observed floating rate, then the fixed and floating amounts that will accrue are discounted (typically using the observed floating rate to determine the discount factor) to their present value on the settlement date. This discount factor may differ from the rate at which you would be able to invest or borrow funds. Valuation considerations for FRAs are generally similar to those for interest rate swaps.

Caps/floors/collars

A cap or a floor is an option or series of options on a floating rate in which the buyer receives a payment only if the floating rate exceeds an agreed upon strike rate in the case of a cap, or falls below the strike rate in the case of a floor, on a specified date or dates. If the buyer of a cap or floor pays the premium at the commencement of the transaction, the credit exposure under the transaction will be one-way (i.e., only the buyer faces counterparty credit risk). If the buyer of the cap or floor pays the premium during or at the conclusion of the trade, both parties will have counterparty credit risk.

A “collar” is a transaction in which one of the parties purchases a cap and sells a floor. The premium received from selling the floor may offset all or a portion of the premium for the purchased cap, or may in some instances be greater than the cap premium. As with other options, the sale of a floor or cap entails certain risks. See Section III.J -- “Option Transactions present special considerations” -- of the General Disclosure Statement. If you are considering purchasing a collar in order to hedge a floating rate borrowing, you should be aware that by selling the embedded floor you will forego any benefit from reduced borrowing costs if interest rates decline below the strike rate of the floor.

Swaptions

An interest rate swaption is an option that provides one party with the right, but not the obligation, to enter into an interest rate swap at an agreed-upon fixed rate on the specified future exercise date or dates. In a “pay-fixed” swaption, the holder of the swaption has the right to enter into an interest rate swap as a payer of the fixed rate and receiver of the floating rate, whereas in a “receive-fixed” swaption, the holder has the right to enter into an interest rate swap as a receiver of the fixed rate and a payer of the floating rate. In either case, the writer of the swaption has the obligation to enter into the opposite side of the interest rate swap from the holder. Swaptions are options and have the risks and characteristics described in Section III.J -- “Option Transactions present special considerations” -- of the General Disclosure Statement.

In some cases, you may decide to purchase an interest rate swaption to lock in interest rate hedging terms in advance of a future financing. You should be aware that if the future

transaction is not consummated for any reason, you will have received no hedging benefit from the premium payment and other costs incurred in purchasing the swaption.

In some cases, you may decide to sell an interest rate swaption. Selling a swaption may involve substantial risks analogous to uncovered option writing. See Section III.J – “Option Transactions present special considerations” – of the General Disclosure Statement. Your objective in selling the swaption, for example, may be to capture the value of options you own, such as an option to redeem or prepay indebtedness, or your anticipated flexibility in determining when and whether to issue future indebtedness. You should be aware that such strategies are inherently risky, depend on a confluence of factors that are difficult to predict and may result in substantial losses.

A pay-fixed swaption generally increases in value as the par swap rate (i.e., the value of the fixed rate at which a swap has zero present value) for the underlying swap increases, assuming other relevant factors remain unchanged. The converse is true for a receive-fixed swaption. As with other options, the price of any swaption will reflect both an intrinsic value component, which may be zero, and a time premium component. See Section III.J – “Option Transactions present special considerations” – of the General Disclosure Statement. The pricing of interest rate swaptions is inherently more complex than the pricing of many other options because the value of an interest rate swap is a function of the entire yield curve rather than a single market price. Valuation models differ in the parameters used to describe fluctuations of the yield curve, and may be significantly more complex than option pricing models employed for other asset classes based on a single volatility.

As with other options, a swaption has an exercise style, which may be European, American or Bermudan, and exercise may be subject to various conditions. You should review and understand the conditions and requirements for exercising a swaption and the consequences of exercise, as described in Section III.J of the General Disclosure Statement.