
Exchange Advisory

TO: Eris Exchange Market Participants

FROM: Eris Exchange Control Center and Market Regulation Department

ADVISORY: #15-02

DATE: May 22, 2015

SUBJECT: Change to Eris PAI Calculation Time

Background

This Exchange Advisory serves to notify Participants of Eris Exchange, LLC ("Eris Exchange" or "Exchange") that:

- I. The Exchange is adjusting the time that the daily Eris PAI is calculated and applied to trades executed during Regular Trading Hours by ten minutes, from 8:20 am ET – 5:00 pm ET to 8:30 am ET – 5:00 pm ET, as of the effective date.
- II. The Exchange has filed a self-certification with the Commodity Futures Trading Commission to amend the Contract Specification (Rule 1101) accordingly.
- III. **Subject to regulatory review, these changes will be effective on June 8, 2015.**

The amended Contract Specifications (Rule 1101) are attached in redline form as Attachment A and in clean form as Attachment B.

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ATTACHMENT A

RULE 1101. Eris Interest Rate Swap Futures Contract Specifications

CHAPTER 11: CONTRACT SPECIFICATIONS

RULE 1101. Eris Interest Rate Swap Futures Contract Specifications

(a) Flex Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): <ul style="list-style-type: none"> Monday – Friday; 7:00 am to 4:30 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Contract Size	1 Contract = 1 lot = \$100,000 face.
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> Reset Frequency Semi-Annual Day Count Convention 30/360 Currency USD Holiday Calendar(s) New York, London Business Day Convention Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> Reset Frequency Quarterly Day Count Convention Actual/360 Currency USD Holiday Calendar(s) New York, London Business Day Convention Modified Following with adjustment to period end dates
Effective Date	<p>The first date from which fixed and floating interest amounts accrue.</p> <ul style="list-style-type: none"> To determine the Effective Date of a spot-starting Eris Interest Rate Swap Future, move two business days forward from the trade date in the London calendar, and then check the NY Fed Calendar. If that day is a valid NY business day, then that is the Effective Date. If that day is a NY holiday, then continue to move forward to the next day that is a valid business day on both the LN

	and NY calendars.
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating reset dates, and for determination of the Maturity Date</p> <p>The Cash Flow Alignment Date can be defined as any date up to 30 years following the Effective Date. CFAD can be derived, if necessary, by adding the tenor to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 12/30/2010 and a tenor of three years implies a Cash Flow Alignment Date of 12/30/2013. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following Rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both the NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAITM accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Trading Period Type	<p>Spot:</p> <ul style="list-style-type: none"> • A new contract or one created on a prior date, in which the Effective Date is the same as a spot starting contract traded on that day. <p>Forward:</p> <ul style="list-style-type: none"> • A new contract or one created on a prior date, in which the Effective Date is after the Effective Date of a spot starting contract traded on that day. The maximum possible time between the Effective Date of a spot starting contract and the Effective Date of a forward starting contract is 10 years.

	<p>Seasoned:</p> <ul style="list-style-type: none"> • A new contract or one created on a prior date, in which the Effective Date is before the Effective Date of a spot starting contract traded on that day. <p>The Ticker Symbol remains the same as it transitions throughout period types.</p>
Underlying Tenor	<p>The duration of time from the Effective Date to the Cash Flow Alignment Date.</p> <p>A Contract can have an Underlying Tenor as long dated as 30 years, with precision down to each valid business day.</p>
Remaining Tenor	<p>The duration of time from today to the Cash Flow Alignment Date.</p> <p>A Contract can have a Remaining Tenor as long dated as 40 years, with precision down to each valid business day.</p>
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p> <ul style="list-style-type: none"> • For example, if the CFAD is 12/15/2030, the Reset Dates will be on the 15th of March, June, September and December, subject to the Modified Following convention.
Last Trading Day	<p>The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.</p>
First LIBOR Fixing Date	<p>For spot starting contracts, the first LIBOR Fixing Date is the trade date.</p> <p>For forward starting contracts, the first LIBOR Fixing Date is 2 London business days prior to the Effective Date.</p>
Other LIBOR Fixing	<p>For all periods other than the first floating rate period, the LIBOR</p>

Date	Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index: First Period	<p>3 Month USD LIBOR for all contracts with standard first floating rate period (i.e., length of period is 3 months, adjusted for Modified Following).</p> <p>For both Spot Starting and Forward Starting Contracts with non-standard tenors, a short front stub period of less than 3 months may occur between the Effective Date and the first Reset Date. In these cases, the first LIBOR Fixing Rate is determined using linear interpolation based on the two LIBOR indices that surround the Stub Period on the first LIBOR Fixing Date.</p> <ul style="list-style-type: none"> • The following USD LIBOR indices will be used to determine the fixing rate for a stub period: Overnight, 1 Week, 1 Month, 2 Month and 3 Month. • For example, the first LIBOR fixing rate for a contract with a stub period of 45 days will be interpolated between the 1 month and 2 month LIBOR rates.
Floating Rate Index: Subsequent Periods	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p>S_t = settlement price at time t</p> <p>A_t = net present value of the future cash flows at time t, based on OIS discounting</p> <p>B_t = value of the historical fixed and floating amounts since contract inception</p> <p>C_t = Eris Price Alignment Interest (or Eris PAITM).</p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAI is a cumulative value calculated daily by applying the</p>

	<p>overnight Fed Funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAI™ will start accruing on the first trade date.</p> <p>Eris Exchange calculates daily Eris PAI™ for all trades executed between 8:20am and 4:30pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ <p> S_{final} = Settlement price at maturity B_{final} = Historical fixed and floating amounts since contract inception through maturity C_{final} = Eris PAI™, at maturity </p>
Quoting Convention – Par Swap Futures	<p>During the Forward and Spot Periods, market participants can trade Par Swap Futures by negotiating the par fixed rate for a given Effective Date and Cash Flow Alignment Date.</p> <p>Each Par Swap Future negotiated in fixed rate terms carries an implicit futures-style price of 100.0000.</p> <p>For Par Swap Futures the fixed rate can be negotiated in increments of one-tenth of one basis point, from 0.000% to 9.999%.</p>
Quoting Convention – Off-Market Swap Futures	<p>During the Spot, Forward and Seasoned periods of a given Contract, market participants can negotiate the Net Present Value (NPV) per Contract.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Off-Market Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $Trade\ Price = 100 + A_{negotiated} + B_t - C_t$ <p>where $A_{negotiated}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100</p>

	<p>face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated once-daily and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p><u>Eris Exchange calculates daily Eris PAI™ for all trades executed between 8:208:30am and 4:30pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</u></p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than two years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years. • \$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years. • \$20 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 20 years.
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed, except that Block Trades in Eris Flexes may not be executed from 4:30 pm to 5:00 pm Eastern Time on Business Days.</p> <p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is

	<p>500 Contracts (\$50M notional).</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRP's) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed.</p> <p>EDRP's must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>

Ticker Symbol Convention	<p>Product Family + Tenor + Maturity</p> <p>The first new trade for a given maturity date will be issued (by Eris Exchange systems) a ticker symbol comprised of Clearing Code 'Z(tenor category)0001', concatenated with the Period representing the maturity date in YYYYMMDD format.</p> <p>A contract's Tenor is defined as the difference between the contract's Effective Date and its Cash Flow Alignment Date.</p> <p>Tenor category are as follows:</p> <p>ZA = Tenors greater than zero and less than or equal to two years</p> <p>ZB = Tenors greater than two years and less than or equal to five years</p> <p>ZC = Tenors greater than five years and less than or equal to ten years</p> <p>ZD = Tenors greater than ten years</p> <p>The first Contract that trades with a particular maturity is assigned Product Family Z(A)0001. The next Contract that trades with the same maturity, but with a different start date or coupon, is assigned Product Family Z(A)0002.</p> <p>For example, assume that the trade is a 10-year swap future initiated with an Effective Date of 20-Dec-2010, Maturity Date of 20-Dec-2020 and coupon of 0.710. Because the trade is the first to carry the maturity date 20-Dec-2020, the issued ticker symbol is ZC000120201220. The C denotes that this is in the 5+ to 10 years tenor category.</p> <p>Notwithstanding the above, for purposes of trade entry in BlockBox, a Flex Contract with the same Effective Date, Cash Flow Alignment Date and Fixed Rate as a Standard Contract will, by default, be filled as a Standard Contract. Similarly, SwapBook will not permit the creation of an order for a Flex Contract with the same Effective Date, Cash Flow Alignment Date and Fixed Rate as a Standard Contract.</p>
Listed Spreads	<p>Listed Spreads (or Discrete Spreads), composed of featured Contracts, may be traded using the SwapBook Discrete Spread functionality</p>

Standard Contract Specifications

(1) 2 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	2 Years
Contract Short Name	2Y Stnd <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and <YYYY-YYYY> will represent the year of the Effective Date and the year of the Maturity Date For example, the 2Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2016 will have a Contract Short Name of “2Y Stnd Sep 2014-2016”
Fixed Rate	Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract <ul style="list-style-type: none"> • Determined just prior to quarterly listing • Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> • Reset Frequency Semi-Annual • Day Count Convention 30/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> • Reset Frequency Quarterly • Day Count Convention Actual/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with

	adjustment to period end dates
Effective Dates	Quarterly IMM Dates (3 rd Wednesday of each March, June, September, December) Monthly dates as provided by the Exchange in an Exchange Advisory
Cash Flow Alignment Date (“CFAD”)	The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date. CFAD can be derived by adding 2 Years to the Effective Date. For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 2 years implies a Cash Flow Alignment Date of 09/19/2014. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.
Maturity Date	The final date to which fixed and floating amounts accrue. The last date of the contract. Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date. Eris PAI™ accrues up to and including the Maturity Date. The Maturity Date may also be referred to as Termination Date.
Underlying Tenor	The duration of time from the Effective Date to the Cash Flow Alignment Date.
Remaining Tenor	The duration of time from today to the Cash Flow Alignment Date.
Reset Dates	Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates. The Cash Flow Alignment Date will be used as the basis for

	<p>determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p> <ul style="list-style-type: none"> For example, if the CFAD is 09/19/2014, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAITM). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAITM is a cumulative value calculated daily by applying the overnight Fed Funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAITM will start accruing on the first listing date.</p> <p>Eris Exchange calculates daily Eris PAITM for all trades executed between 8:20am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAITM is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$

	<p>S_{final} = Settlement price at maturity</p> <p>B_{final} = Historical fixed and floating amounts since contract inception through maturity</p> <p>C_{final} = Eris PAI™, at maturity</p>
Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $\text{Trade Price} = 100 + A_{\text{negotiated}} + B_t - C_t$ <p>where $A_{\text{negotiated}}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated once daily and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p><u>Eris Exchange calculates daily Eris PAI™ for all trades executed between 8:208:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</u></p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p>

	<p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is 500 Contracts (\$50M notional). • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed.</p> <p>EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>
Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD Product Code: ZA9102; initial contract fixed rate Product Code: ZA9202; secondary contract fixed rate</p> <p>For example, the 2 Year Standard Contract with Product Code of ZA9102 and Maturity Date of 12/19/14 will have a ticker symbol of ZA910220141219.</p>
Listed Spreads	<p>Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality.</p>

(2) 5 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	5 Years
Contract Short Name	5Y Stnd <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and <YYYY-YYYY> will represent the year of the Effective Date and the year of the Maturity Date For example, the 5Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2019 will have a Contract Short Name of “5Y Stnd Sep 2014-2019”
Fixed Rate	Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract <ul style="list-style-type: none"> • Determined just prior to quarterly listing • Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> • Reset Frequency Semi-Annual • Day Count Convention 30/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> • Reset Frequency Quarterly • Day Count Convention Actual/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates

Effective Dates	<p>Quarterly IMM Dates (3rd Wednesday of each March, June, September, December)</p> <p>Monthly dates as provided by the Exchange in an Exchange Advisory</p>
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date.</p> <p>CFAD can be derived by adding 5 Years to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 5 years implies a Cash Flow Alignment Date of 09/19/2017. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAI™ accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Underlying Tenor	The duration of time from the Effective Date to the Cash Flow Alignment Date.
Remaining Tenor	The duration of time from today to the Cash Flow Alignment Date.
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p>

	<ul style="list-style-type: none"> For example, if the CFAD is 09/19/2017, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAITM). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAITM is a cumulative value calculated daily by applying the overnight Fed Funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAITM will start accruing on the first listing date.</p> <p>Eris Exchange calculates daily Eris PAITM for all trades executed between 8:20am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAITM is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ <p> S_{final} = Settlement price at maturity B_{final} = Historical fixed and floating amounts since </p>

	<p>contract inception through maturity</p> $C_{\text{final}} = \text{Eris PAI}^{\text{TM}}, \text{ at maturity}$
Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $\text{Trade Price} = 100 + A_{\text{negotiated}} + B_t - C_t$ <p>where $A_{\text{negotiated}}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAITM at time t.</p> <p>The B and C components are calculated once-daily and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p><u>Eris Exchange calculates daily Eris PAITM for all trades executed between 8:208:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAITM is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</u></p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p>

	<p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is 500 Contracts (\$50M notional). • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed.</p> <p>EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>
Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD</p> <p>Product Code: ZB9105; initial contract fixed rate Product Code: ZB9205; secondary contract fixed rate</p> <p>For example, the 5 Year Standard Contract with Product Code of ZB9105 and Maturity Date of 12/19/17 will have a ticker symbol of ZB910520171219.</p>
Listed Spreads	<p>Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality.</p>

(3) 7 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): <ul style="list-style-type: none"> Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	7 Years
Contract Short Name	<p>7Y Stnd <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and the <YYYY-YYYY> will represent the Effective Date and the year of the Maturity date.</p> <p>For example, the 7Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2021 will have a Contract Short Name of “7Y Stnd Sep 2014-2021”</p>
Fixed Rate	<p>Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract</p> <ul style="list-style-type: none"> Determined just prior to quarterly listing Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	<p>Buy = Pay Fixed</p> <p>Sell = Receive Fixed</p>
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> Reset Frequency Semi-Annual Day Count Convention 30/360 Currency USD Holiday Calendar(s) New York, London Business Day Convention Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> Reset Frequency Quarterly

	<ul style="list-style-type: none"> • Day Count Convention Actual/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates
Effective Dates	<p>Quarterly IMM Dates (3rd Wednesday of each March, June, September, December)</p> <p>Monthly dates as provided by the Exchange in an Exchange Advisory.</p>
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date.</p> <p>CFAD can be derived by adding 7 Years to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 7 years implies a Cash Flow Alignment Date of 09/19/2019. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAITM accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Underlying Tenor	The duration of time from the Effective Date to the Cash Flow Alignment Date.
Remaining Tenor	The duration of time from today to the Cash Flow Alignment Date.

Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p> <ul style="list-style-type: none"> For example, if the CFAD is 09/19/2019, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p>S_t = settlement price at time t</p> <p>A_t = net present value of the future cash flows at time t, based on OIS discounting</p> <p>B_t = value of the historical fixed and floating amounts since contract inception</p> <p>C_t = Eris Price Alignment Interest (or Eris PAITM).</p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAITM is a cumulative value calculated daily by applying the</p>

	<p>overnight Fed Funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAI™ will start accruing on the first listing date.</p> <p>Eris Exchange calculates daily Eris PAI™ for all trades executed between 8:20am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ <p>S_{final} = Settlement price at maturity</p> <p>B_{final} = Historical fixed and floating amounts since contract inception through maturity</p> <p>C_{final} = Eris PAI™, at maturity</p>
Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $Trade\ Price = 100 + A_{negotiated} + B_t - C_t$ <p>where $A_{negotiated}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated once-daily and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p><u>Eris Exchange calculates daily Eris PAI™ for all trades executed between 8:20:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</u></p>

	<p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than two years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years. • \$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years.
Listed Spreads	Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p> <p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is 500 Contracts (\$50M notional). • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>

Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange. EDRP's may be executed at any time, including times in which the public auction market is closed.</p> <p>EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>
Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD</p> <p>Product Code: ZC9107; initial contract fixed rate</p> <p>Product Code: ZC9207; secondary contract fixed rate</p> <p>For example, the 7Y contract with Product Code of ZC9107 and Maturity Date of 12/19/19 will have a ticker symbol of ZC910720191219</p>

(4) 10 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): <ul style="list-style-type: none"> Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	10 Years
Contract Short Name	<p>10Y Stnd <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and <YYYY-YYYY> will represent the year of the Effective Date and the year of the Maturity Date</p> <p>For example, the 10Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2024 will have a Contract Short Name of “10Y Stnd Sep 2014-2024”</p>
Fixed Rate	<p>Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract</p> <ul style="list-style-type: none"> Determined just prior to quarterly listing Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	<p>Buy = Pay Fixed</p> <p>Sell = Receive Fixed</p>
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> Reset Frequency: Semi-Annual Day Count Convention: 30/360 Currency: USD Holiday Calendar(s): New York, London Business Day Convention: Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> Reset Frequency: Quarterly Day Count Convention: Actual/360 Currency: USD Holiday Calendar(s): New York, London Business Day Convention: Modified Following with adjustment to period end

	dates
Effective Dates	<p>Quarterly IMM Dates (3rd Wednesday of each March, June, September, December)</p> <p>Monthly dates as provided by the Exchange in an Exchange Advisory</p>
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date.</p> <p>CFAD can be derived by adding 10 Years to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 10 years implies a Cash Flow Alignment Date of 09/19/2022. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAI™ accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Underlying Tenor	The duration of time from the Effective Date to the Cash Flow Alignment Date.
Remaining Tenor	The duration of time from today to the Cash Flow Alignment Date.
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for</p>

	<p>determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p> <ul style="list-style-type: none"> For example, if the CFAD is 09/19/2022, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAI™). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAI™ is a cumulative value calculated daily by applying the overnight Fed Funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAI™ will start accruing on the first listing date.</p> <p>Eris Exchange calculates daily Eris PAI™ for all trades executed between 8:20am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$

	<p>S_{final} = Settlement price at maturity</p> <p>B_{final} = Historical fixed and floating amounts since contract inception through maturity</p> <p>C_{final} = Eris PAI™, at maturity</p>
Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $Trade\ Price = 100 + A_{negotiated} + B_t - C_t$ <p>where $A_{negotiated}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated once daily and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p><u>Eris Exchange calculates daily Eris PAI™ for all trades executed between 8:208:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</u></p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than greater than or equal 4 years and less than 7 years. • \$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than greater than or equal 7 years and less than 20 years.

Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p> <p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is 500 Contracts (\$50M notional). • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed.</p> <p>EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>

Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD</p> <p>Product Code: ZC9110; initial contract fixed rate Product Code: ZC9210; secondary contract fixed rate</p> <p>For example, the 10 Year Standard Contract with Product Code of ZC9110 and Maturity Date of 12/19/22 will have a ticker symbol of ZC911020221219.</p>
Listed Spreads	Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality.

(5) 30 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): <ul style="list-style-type: none"> Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	30 Years
Contract Short Name	<p>30Y Stnd <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and <YYYY-YYYY> will represent the year of the Effective Date and the year of the Maturity Date</p> <p>For example, the 30Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2044 will have a Contract Short Name of “30Y Stnd Sep 2014-2044”</p>
Fixed Rate	<p>Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract</p> <ul style="list-style-type: none"> Determined just prior to quarterly listing Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	<p>Buy = Pay Fixed</p> <p>Sell = Receive Fixed</p>
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> Reset Frequency: Semi-Annual Day Count Convention: 30/360 Currency: USD Holiday Calendar(s): New York, London Business Day Convention: Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> Reset Frequency: Quarterly Day Count Convention: Actual/360 Currency: USD Holiday Calendar(s): New York, London Business Day Convention: Modified Following with adjustment to period end

	dates
Effective Dates	<p>Quarterly IMM Dates (3rd Wednesday of each March, June, September, December)</p> <p>Monthly dates as provided by the Exchange in an Exchange Advisory</p>
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date.</p> <p>CFAD can be derived by adding 30 Years to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 30 years implies a Cash Flow Alignment Date of 09/19/2042. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAI™ accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Underlying Tenor	The duration of time from the Effective Date to the Cash Flow Alignment Date.
Remaining Tenor	The duration of time from today to the Cash Flow Alignment Date.
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for</p>

	<p>determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p> <ul style="list-style-type: none"> For example, if the CFAD is 09/19/2042, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAITM). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAITM is a cumulative value calculated daily by applying the overnight Fed Funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAITM will start accruing on the first listing date.</p> <p>Eris Exchange calculates daily Eris PAITM for all trades executed between 8:20am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAITM is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$

	<p>S_{final} = Settlement price at maturity</p> <p>B_{final} = Historical fixed and floating amounts since contract inception through maturity</p> <p>C_{final} = Eris PAI™, at maturity</p>
Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> <p><i>Trade Price</i> = $100 + A_{\text{negotiated}} + B_t - C_t$</p> <p>where $A_{\text{negotiated}}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated once-daily and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p><u>Eris Exchange calculates daily Eris PAI™ for all trades executed between 8:208:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, daily Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</u></p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years. • \$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years. • \$20 for Contracts where the lesser of Remaining

	Tenor/Underlying Tenor is greater than or equal to 20 years.
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p> <p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is 500 Contracts (\$50M notional). • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed.</p> <p>EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>

Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD</p> <p>Product Code: ZD9130; initial contract fixed rate Product Code: ZD9230; secondary contract fixed rate</p> <p>For example, the 30 Year Standard Contract with Product Code of ZD9130 and Maturity Date of 12/19/42 will have a ticker symbol of ZD913020421219.</p>
Listed Spreads	Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality.

Certain elements of the contract design and pricing construct are patent pending.

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ATTACHMENT B

RULE 1101. Eris Interest Rate Swap Futures Contract Specifications

Eris Interest Rate Swap Futures:

(a) Flex Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): Monday – Friday; 7:00 am to 4:30 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Contract Size	1 Contract = 1 lot = \$100,000 face.
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> Reset Frequency: Semi-Annual Day Count Convention: 30/360 Currency: USD Holiday Calendar(s): New York, London Business Day Convention: Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> Reset Frequency: Quarterly Day Count Convention: Actual/360 Currency: USD Holiday Calendar(s): New York, London Business Day Convention: Modified Following with adjustment to period end dates
Effective Date	<p>The first date from which fixed and floating interest amounts accrue.</p> <ul style="list-style-type: none"> To determine the Effective Date of a spot-starting Eris Interest Rate Swap Future, move two business days forward from the trade date in the London calendar, and then check the NY Fed Calendar. If that day is a valid NY business day, then that is the Effective Date. If that day is a NY holiday, then continue to move forward to the next day that is a valid business day on both the LN and NY calendars.
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating reset dates, and for determination of the Maturity Date</p> <p>The Cash Flow Alignment Date can be defined as any date up</p>

	<p>to 30 years following the Effective Date. CFAD can be derived, if necessary, by adding the tenor to the Effective Date. For example, an Eris Interest Rate Swap Future with an Effective Date of 12/30/2010 and a tenor of three years implies a Cash Flow Alignment Date of 12/30/2013. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following Rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both the NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date. Eris PAITM accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Trading Period Type	<p>Spot:</p> <ul style="list-style-type: none"> A new contract or one created on a prior date, in which the Effective Date is the same as a spot starting contract traded on that day. <p>Forward:</p> <ul style="list-style-type: none"> A new contract or one created on a prior date, in which the Effective Date is after the Effective Date of a spot starting contract traded on that day. The maximum possible time between the Effective Date of a spot starting contract and the Effective Date of a forward starting contract is 10 years. <p>Seasoned:</p> <ul style="list-style-type: none"> A new contract or one created on a prior date, in which the Effective Date is before the Effective Date of a spot starting contract traded on that day. <p>The Ticker Symbol remains the same as it transitions throughout period types.</p>
Underlying Tenor	<p>The duration of time from the Effective Date to the Cash Flow Alignment Date.</p> <p>A Contract can have an Underlying Tenor as long dated as 30</p>

	years, with precision down to each valid business day.
Remaining Tenor	<p>The duration of time from today to the Cash Flow Alignment Date.</p> <p>A Contract can have a Remaining Tenor as long dated as 40 years, with precision down to each valid business day.</p>
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p> <ul style="list-style-type: none"> For example, if the CFAD is 12/15/2030, the Reset Dates will be on the 15th of March, June, September and December, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	<p>For spot starting contracts, the first LIBOR Fixing Date is the trade date.</p> <p>For forward starting contracts, the first LIBOR Fixing Date is 2 London business days prior to the Effective Date.</p>
Other LIBOR Fixing Date	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index: First Period	<p>3 Month USD LIBOR for all contracts with standard first floating rate period (i.e., length of period is 3 months, adjusted for Modified Following).</p> <p>For both Spot Starting and Forward Starting Contracts with non-standard tenors, a short front stub period of less than 3 months may occur between the Effective Date and the first Reset Date. In these cases, the first LIBOR Fixing Rate is determined using linear interpolation based on the two LIBOR indices that surround the Stub Period on the first LIBOR Fixing Date.</p> <ul style="list-style-type: none"> The following USD LIBOR indices will be used to determine the fixing rate for a stub period: Overnight, 1 Week, 1 Month, 2 Month and 3 Month. For example, the first LIBOR fixing rate for a contract with a stub period of 45 days will be interpolated between the 1 month and 2 month LIBOR rates.

Floating Rate Index: Subsequent Periods	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAI™). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAI is a cumulative value calculated daily by applying the overnight fed funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAI™ will start accruing on the first trade date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ <p> S_{final} = Settlement price at maturity B_{final} = Historical fixed and floating amounts since contract inception through maturity C_{final} = Eris PAI™, at maturity </p>
Quoting Convention – Par Swap Futures	<p>During the Forward and Spot Periods, market participants can trade Par Swap Futures by negotiating the par fixed rate for a given Effective Date and Cash Flow Alignment Date.</p> <p>Each Par Swap Future negotiated in fixed rate terms carries an implicit futures-style price of 100.0000.</p> <p>For Par Swap Futures the fixed rate can be negotiated in increments of one-tenth of one basis point, from 0.000% to 9.999%.</p>
Quoting Convention – Off-Market Swap Futures	<p>During the Spot, Forward and Seasoned periods of a given Contract, market participants can negotiate the Net Present Value (NPV) per Contract.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Off-Market Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $Trade\ Price = 100 + A_{negotiated} + B_t - C_t$

	<p>where $A_{negotiated}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p>Eris Exchange calculates Eris PAI™ for all trades executed between 8:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than two years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years. • \$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years. • \$20 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 20 years.
<p>Block Trades</p>	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed, except that Block Trades in Eris Flexes may not be executed from 4:30 pm to 5:00 pm Eastern Time on Business Days.</p> <p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p>

	<p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is 500 Contracts (\$50M notional). • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRP's) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed.</p> <p>EDRP's must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>

Ticker Symbol Convention	<p>Product Family + Tenor + Maturity</p> <p>The first new trade for a given maturity date will be issued (by Eris Exchange systems) a ticker symbol comprised of Clearing Code 'Z(tenor category)0001', concatenated with the Period representing the maturity date in YYYYMMDD format.</p> <p>A contract's Tenor is defined as the difference between the contract's Effective Date and its Cash Flow Alignment Date.</p> <p>Tenor category are as follows:</p> <p>ZA = Tenors greater than zero and less than or equal to two years ZB = Tenors greater than two years and less than or equal to five years ZC = Tenors greater than five years and less than or equal to ten years ZD = Tenors greater than ten years</p> <p>The first Contract that trades with a particular maturity is assigned Product Family Z(A)0001. The next Contract that trades with the same maturity, but with a different start date or coupon, is assigned Product Family Z(A)0002.</p> <p>For example, assume that the trade is a 10-year swap future initiated with an Effective Date of 20-Dec-2010, Maturity Date of 20-Dec-2020 and coupon of 0.710. Because the trade is the first to carry the maturity date 20-Dec-2020, the issued ticker symbol is ZC000120201220. The C denotes that this is in the 5+ to 10 years tenor category.</p> <p>Notwithstanding the above, for purposes of trade entry in BlockBox, a Flex Contract with the same Effective Date, Cash Flow Alignment Date and Fixed Rate as a Standard Contract will, by default, be filled as a Standard Contract. Similarly, SwapBook will not permit the creation of an order for a Flex Contract with the same Effective Date, Cash Flow Alignment Date and Fixed Rate as a Standard Contract.</p>
Listed Spreads	<p>Listed Spreads (or Discrete Spreads), composed of featured Contracts, may be traded using the SwapBook Discrete Spread functionality</p>

(a) Standard Contract Specifications

(1) 2 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	2 Years
Contract Short Name	<p>2Y Std <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and <YYYY-YYYY> will represent the year of the Effective Date and the year of the Maturity Date</p> <p>For example, the 2Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2016 will have a Contract Short Name of “2Y Std Sep 2014-2016”</p>
Fixed Rate	<p>Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract</p> <ul style="list-style-type: none"> • Determined just prior to quarterly listing • Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	<p>Buy = Pay Fixed Sell = Receive Fixed</p>
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> • Reset Frequency: Semi-Annual • Day Count Convention: 30/360 • Currency: USD • Holiday Calendar(s): New York, London • Business Day Convention: Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> • Reset Frequency: Quarterly • Day Count Convention: Actual/360 • Currency: USD • Holiday Calendar(s): New York, London • Business Day Convention: Modified Following with adjustment to period end dates

Effective Dates	<p>Quarterly IMM Dates (3rd Wednesday of each March, June, September, December)</p> <p>Monthly dates as provided by the Exchange in an Exchange Advisory</p>
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date.</p> <p>CFAD can be derived by adding 2 Years to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 2 years implies a Cash Flow Alignment Date of 09/19/2014. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAI™ accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Underlying Tenor	<p>The duration of time from the Effective Date to the Cash Flow Alignment Date.</p>
Remaining Tenor	<p>The duration of time from today to the Cash Flow Alignment Date.</p>
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p>

	<ul style="list-style-type: none"> For example, if the CFAD is 09/19/2014, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAI™). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAI™ is a cumulative value calculated daily by applying the overnight fed funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAI™ will start accruing on the first listing date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ <p> S_{final} = Settlement price at maturity B_{final} = Historical fixed and floating amounts since contract inception through maturity C_{final} = Eris PAI™, at maturity </p>

Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $\text{Trade Price} = 100 + A_{\text{negotiated}} + B_t - C_t$ <p>where $A_{\text{negotiated}}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p>Eris Exchange calculates Eris PAI™ for all trades executed between 8:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p> <p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is 500 Contracts (\$50M notional).

	<ul style="list-style-type: none"> For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed. EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>
Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD Product Code: ZA9102; initial contract fixed rate Product Code: ZA9202; secondary contract fixed rate</p> <p>For example, the 2 Year Standard Contract with Product Code of ZA9102 and Maturity Date of 12/19/14 will have a ticker symbol of ZA910220141219.</p>
Listed Spreads	<p>Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality.</p>

(2) 5 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	5 Years
Contract Short Name	<p>5Y Stnd <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and <YYYY-YYYY> will represent the year of the Effective Date and the year of the Maturity Date</p> <p>For example, the 5Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2019 will have a Contract Short Name of “5Y Stnd Sep 2014-2019”</p>
Fixed Rate	<p>Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract</p> <ul style="list-style-type: none"> • Determined just prior to quarterly listing • Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	<p>Buy = Pay Fixed</p> <p>Sell = Receive Fixed</p>
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> • Reset Frequency Semi-Annual • Day Count Convention 30/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> • Reset Frequency Quarterly • Day Count Convention Actual/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates

Effective Dates	<p>Quarterly IMM Dates (3rd Wednesday of each March, June, September, December)</p> <p>Monthly dates as provided by the Exchange in an Exchange Advisory</p>
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date.</p> <p>CFAD can be derived by adding 5 Years to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 5 years implies a Cash Flow Alignment Date of 09/19/2017. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAI™ accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Underlying Tenor	The duration of time from the Effective Date to the Cash Flow Alignment Date.
Remaining Tenor	The duration of time from today to the Cash Flow Alignment Date.
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p>

	<ul style="list-style-type: none"> For example, if the CFAD is 09/19/2017, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAI™). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAI™ is a cumulative value calculated daily by applying the overnight fed funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAI™ will start accruing on the first listing date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ <p> S_{final} = Settlement price at maturity B_{final} = Historical fixed and floating amounts since contract inception through maturity C_{final} = Eris PAI™, at maturity </p>

Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $\text{Trade Price} = 100 + A_{\text{negotiated}} + B_t - C_t$ <p>where $A_{\text{negotiated}}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p>Eris Exchange calculates Eris PAI™ for all trades executed between 8:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p> <p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is

	<p>500 Contracts (\$50M notional).</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed. EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>
Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD</p> <p>Product Code: ZB9105; initial contract fixed rate Product Code: ZB9205; secondary contract fixed rate</p> <p>For example, the 5 Year Standard Contract with Product Code of ZB9105 and Maturity Date of 12/19/17 will have a ticker symbol of ZB910520171219.</p>
Listed Spreads	<p>Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality.</p>

(3) 7 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	7 Years
Contract Short Name	<p>7Y Stnd <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and <YYYY-YYYY> will represent the year of the Effective Date and the year of the Maturity Date</p> <p>For example, the 7Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2021 will have a Contract Short Name of “7Y Stnd Sep 2014-2021”</p>
Fixed Rate	<p>Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract</p> <ul style="list-style-type: none"> • Determined just prior to quarterly listing • Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	<p>Buy = Pay Fixed</p> <p>Sell = Receive Fixed</p>
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> • Reset Frequency Semi-Annual • Day Count Convention 30/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> • Reset Frequency Quarterly • Day Count Convention Actual/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates

Effective Dates	<p>Quarterly IMM Dates (3rd Wednesday of each March, June, September, December)</p> <p>Monthly dates as provided by the Exchange in an Exchange Advisory.</p>
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date.</p> <p>CFAD can be derived by adding 7 Years to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 7 years implies a Cash Flow Alignment Date of 09/19/2019. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAI™ accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Underlying Tenor	The duration of time from the Effective Date to the Cash Flow Alignment Date.
Remaining Tenor	The duration of time from today to the Cash Flow Alignment Date.
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for determining Reset Dates. Each Reset Date is subject to</p>

	adjustment based on Modified Following convention. <ul style="list-style-type: none"> For example, if the CFAD is 09/19/2019, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAI™). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAI™ is a cumulative value calculated daily by applying the overnight fed funds effective rate to the contract's NPV, using an Actual/360 daycount convention. Eris PAI™ will start accruing on the first listing date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ <p> S_{final} = Settlement price at maturity B_{final} = Historical fixed and floating amounts since contract inception through maturity C_{final} = Eris PAI™, at maturity </p>
Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate</p>

	<p>payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $\text{Trade Price} = 100 + A_{\text{negotiated}} + B_t - C_t$ <p>where $A_{\text{negotiated}}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p>Eris Exchange calculates Eris PAI™ for all trades executed between 8:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than two years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years. • \$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years.
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p> <p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is

	<p>500 Contracts (\$50M notional).</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed.</p> <p>EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>
Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD</p> <p>Product Code: ZC9107; initial contract fixed rate Product Code: ZC9207; secondary contract fixed rate</p> <p>For example, the 7Y contract with Product Code of ZC9107 and Maturity Date of 12/19/19 will have a ticker symbol of ZC910720191219</p>
Listed Spreads	<p>Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality</p>

(4) 10 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	10 Years
Contract Short Name	10Y Stnd <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and <YYYY-YYYY> will represent the year of the Effective Date and the year of the Maturity Date For example, the 10Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2024 will have a Contract Short Name of “10Y Stnd Sep 2014-2024”
Fixed Rate	Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract <ul style="list-style-type: none"> • Determined just prior to quarterly listing • Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed
Swap Futures Leg Conventions	Fixed Leg <ul style="list-style-type: none"> • Reset Frequency Semi-Annual • Day Count Convention 30/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates Floating Leg <ul style="list-style-type: none"> • Reset Frequency Quarterly • Day Count Convention Actual/360 • Currency USD • Holiday Calendar(s) New York, London • Business Day Convention Modified Following with adjustment to period end dates

Effective Dates	<p>Quarterly IMM Dates (3rd Wednesday of each March, June, September, December)</p> <p>Monthly dates as provided by the Exchange in an Exchange Advisory</p>
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date.</p> <p>CFAD can be derived by adding 10 Years to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 10 years implies a Cash Flow Alignment Date of 09/19/2022. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAI™ accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Underlying Tenor	The duration of time from the Effective Date to the Cash Flow Alignment Date.
Remaining Tenor	The duration of time from today to the Cash Flow Alignment Date.
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p>

	<ul style="list-style-type: none"> For example, if the CFAD is 09/19/2022, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAI™). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAI™ is a cumulative value calculated daily by applying the overnight fed funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAI™ will start accruing on the first listing date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ <p> S_{final} = Settlement price at maturity B_{final} = Historical fixed and floating amounts since contract inception through maturity C_{final} = Eris PAI™, at maturity </p>

Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $\text{Trade Price} = 100 + A_{\text{negotiated}} + B_t - C_t$ <p>where $A_{\text{negotiated}}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p>Eris Exchange calculates Eris PAI™ for all trades executed between 8:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal 4 years and less than 7 years. • \$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal 7 years and less than 20 years.
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p> <p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p>

	<p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is 500 Contracts (\$50M notional). • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed. EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>
Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD</p> <p>Product Code: ZC9110; initial contract fixed rate Product Code: ZC9210; secondary contract fixed rate</p> <p>For example, the 10 Year Standard Contract with Product Code of ZC9110 and Maturity Date of 12/19/22 will have a ticker symbol of ZC911020221219.</p>
Listed Spreads	<p>Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality.</p>

(5) 30 Year Standard Contract Specifications:

Trading Hours	Regular Trading Hours (RTH): Monday – Friday; 7:00 am to 5:00 pm Eastern Time
Contract Structure	\$100,000 notional principal whose value is based upon the difference between a stream of semi-annual fixed interest payments and a stream of quarterly floating interest payments based on 3 month US Dollar LIBOR, over a term to maturity.
Underlying Swap Tenor	30 Years
Contract Short Name	<p>30Y Stnd <Month> <YYYY-YYYY>, where the <Month> will be the first three characters of the month of the Effective Date and <YYYY-YYYY> will represent the year of the Effective Date and the year of the Maturity Date</p> <p>For example, the 30Y Standard with an Effective Date in September 2014 and a Maturity Date in September 2044 will have a Contract Short Name of “30Y Stnd Sep 2014-2044”</p>
Fixed Rate	<p>Pre-determined rate set by Eris Exchange which will remain static throughout the life of the contract</p> <ul style="list-style-type: none"> • Determined just prior to quarterly listing • Multiple fixed rates may be pre-determined
Contract Size	1 Contract = 1 lot = \$100,000 face
Trading Conventions	<p>Buy = Pay Fixed</p> <p>Sell = Receive Fixed</p>
Swap Futures Leg Conventions	<p>Fixed Leg</p> <ul style="list-style-type: none"> • Reset Frequency: Semi-Annual • Day Count Convention: 30/360 • Currency: USD • Holiday Calendar(s): New York, London • Business Day Convention: Modified Following with adjustment to period end dates <p>Floating Leg</p> <ul style="list-style-type: none"> • Reset Frequency: Quarterly • Day Count Convention: Actual/360 • Currency: USD • Holiday Calendar(s): New York, London • Business Day Convention: Modified Following with adjustment to period end dates

Effective Dates	<p>Quarterly IMM Dates (3rd Wednesday of each March, June, September, December)</p> <p>Monthly dates as provided by the Exchange in an Exchange Advisory</p>
Cash Flow Alignment Date (“CFAD”)	<p>The date used for aligning all fixed and floating Reset Dates, and for determination of the Maturity Date.</p> <p>CFAD can be derived by adding 30 Years to the Effective Date.</p> <p>For example, an Eris Interest Rate Swap Future with an Effective Date of 09/19/2012 and a tenor of 30 years implies a Cash Flow Alignment Date of 09/19/2042. Note that the Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays. The CFAD is used to determine the Maturity Date, but the two terms are distinct, as the Maturity Date must fall on a valid business day from the joint holiday calendar.</p>
Maturity Date	<p>The final date to which fixed and floating amounts accrue. The last date of the contract.</p> <p>Maturity Date is determined by applying the Modified Following rule to the Cash Flow Alignment Date. If the Cash Flow Alignment Date is a non-business day in either NY or London, go forward to the next day that is a business day in both NY and London. If the next valid business day is in the following month, the preceding valid business day on both the NY and London holiday calendars will be the Maturity Date.</p> <p>Eris PAI™ accrues up to and including the Maturity Date.</p> <p>The Maturity Date may also be referred to as Termination Date.</p>
Underlying Tenor	The duration of time from the Effective Date to the Cash Flow Alignment Date.
Remaining Tenor	The duration of time from today to the Cash Flow Alignment Date.
Reset Dates	<p>Dates utilized to determine fixed and floating amounts throughout the life of the Contract. Reset Dates define the beginning and end of fixed and floating interest accrual periods. Floating Rate Reset Dates facilitate the determination of the LIBOR Fixing Dates.</p> <p>The Cash Flow Alignment Date will be used as the basis for determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.</p>

	<ul style="list-style-type: none"> For example, if the CFAD is 09/19/2042, the Reset Dates will be on the 19th of December, March, June and September, subject to the Modified Following convention.
Last Trading Day	The last day on which the Contract can be traded is the NY business day preceding the Maturity Date.
First LIBOR Fixing Date	2 London business days prior to the Effective Date.
Other LIBOR Fixing Dates	For all periods other than the first floating rate period, the LIBOR Fixing Date is 2 London business days prior to each Reset Date.
Floating Rate Index	3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).
Daily Settlement Price (Futures-Style Price)	<p>Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.</p> <p>The settlement value for each Contract is defined as:</p> $S_t = 100 + A_t + B_t - C_t$ <p> S_t = settlement price at time t A_t = net present value of the future cash flows at time t, based on OIS discounting B_t = value of the historical fixed and floating amounts since contract inception C_t = Eris Price Alignment Interest (or Eris PAI™). </p> <p>Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).</p> <p>Eris PAI™ is a cumulative value calculated daily by applying the overnight fed funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAI™ will start accruing on the first listing date.</p>
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ <p> S_{final} = Settlement price at maturity B_{final} = Historical fixed and floating amounts since contract inception through maturity C_{final} = Eris PAI™, at maturity </p>

Quoting Convention	<p>Net Present Value (NPV) per Contract will be used for trade execution.</p> <p>NPV is expressed in per contract terms for the Buyer (fixed rate payer).</p> <p>Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of</p> $\text{Trade Price} = 100 + A_{\text{negotiated}} + B_t - C_t$ <p>where $A_{\text{negotiated}}$ is the NPV per Contract agreed upon between the counterparties (divided by 1,000 to normalize units to \$100 face amount), B_t is the value of the historical fixed and floating amounts, and C_t is Eris PAI™ at time t.</p> <p>The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.</p> <p>Eris Exchange calculates Eris PAI™ for all trades executed between 8:30am and 5:00pm ET during RTH using the overnight fed funds effective rate that was published on the morning of the trade date. For all other trades, Eris PAI™ is calculated using the overnight fed funds rate that was published on the morning of the previous trade date.</p> <p>The NPV per Contract can be negotiated in the following increments/tick sizes:</p> <ul style="list-style-type: none"> • \$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years. • \$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years. • \$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years. • \$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years. • \$20 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 20 years.
Block Trades	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.</p> <p>Block Trades may be executed at any time, including times in which the public auction market is closed.</p>

	<p>Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.</p> <p>Current block trade thresholds are as follows and are subject to change:</p> <ul style="list-style-type: none"> • For Contracts with a Remaining Tenor of less than 5 years from trade date, the minimum quantity threshold is 500 Contracts (\$50M notional). • For Contracts with a Remaining Tenor of 5 years or more from trade date, the minimum quantity threshold is 250 Contracts (\$25M notional). • A multiple leg Block Trade is permitted as long as the sum notional of the legs that are transacted simultaneously meets the minimum quantity threshold for the leg with the shortest Remaining Tenor. <p>Eris Exchange will publicly report all Block Trades (instrument, price, quantity) immediately upon successful receipt of the trade details from the party reporting the trade.</p>
Exchange of Derivatives for Related Positions	<p>Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Exchange of Derivatives for Related Positions (EDRPs) and reported to Eris Exchange.</p> <p>EDRP's may be executed at any time, including times in which the public auction market is closed.</p> <p>EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.</p> <p>There are no minimum quantity thresholds required for EDRP's.</p> <p>Eris Exchange does not report EDRP's publicly during the trading day; however, activity from EDRP's is reflected in the Exchange volume and open interest values published at the end of each trading day.</p>
Ticker Symbol Convention	<p>Maturity Code (Period Code) will be YYYYMMDD</p> <p>Product Code: ZD9130; initial contract fixed rate Product Code: ZD9230; secondary contract fixed rate</p> <p>For example, the 30 Year Standard Contract with Product Code of ZD9130 and Maturity Date of 12/19/42 will have a ticker symbol of ZD913020421219.</p>
Listed Spreads	<p>Listed Spreads (or Discrete Spreads), composed of Standard Contracts, may be traded using the SwapBook Discrete Spread functionality.</p>