

January 7, 2016

#### BY ELECTRONIC FILING

Mr. Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of Eris Standard Ultra Forward Swap Futures Contracts (Eris Exchange Submission #2016-02) (2 of 10)

Dear Mr. Kirkpatrick:

Eris Exchange, LLC ("Eris Exchange" or the "Exchange") hereby notifies the Commodity Futures Trading Commission (the "Commission"), pursuant to Commission Regulation § 40.2, of its listing of the 2Y Eris Standard Ultra Forward Swap Future; 3Y Eris Standard Ultra Forward Swap Future; 5Y Eris Standard Ultra Forward Swap Future; 7Y Eris Standard Ultra Forward Swap Future; 10Y Eris Standard Ultra Forward Swap Future; 12Y Eris Standard Ultra Forward Swap Future; 15Y Eris Standard Ultra Forward Swap Future; 20Y Eris Standard Ultra Forward Swap Future; and 30Y Eris Standard Ultra Forward Swap Future Contracts (the "Contracts") on Eris Exchange's electronic trading platform ("Eris SwapBook") beginning January 11, 2016.

This submission contains the following:

- 1. A summary of the terms of the Contracts (see **Section 1**);
- 2. A discussion of the Contracts' compliance with the relevant Designated Contract Market Core Principles ("Core Principles") as set forth in the Commodity Exchange Act (the "Act") and Commission Regulations (see **Section 2**);
- 3. A copy of the Contract Specifications, which shall appear in Exchange Rule 1101 (see Exhibit A); and
- 4. A copy of Exchange Advisory 15-M16 (see Exhibit B).

The listing of these Contracts will not otherwise require the amendments to the Eris Exchange Rulebook.

#### 1. Summary of the Terms of the Contract

Eris Exchange currently lists Eris Standard Interest Rate Swap Futures Contracts ("Standard Contracts") with tenors of 2, 5, 7, 10, and 30 years. The Exchange is adding the above-referenced new Contracts to the existing suite of Standard Contracts. Whereas the current offering of Standard Contracts lists for trading contracts for each of the two immediate quarters with coupons that may align with the market agreed coupon or MAC, the new Contracts offer longer forward starting periods with coupons *not* based upon the MAC. These new Contracts represent an extension of the current offering and have similar terms as the Standard Contracts and offer the same economic characteristics.

All Eris Exchange Standard Contracts, including the submitted Contracts, are cash-settled futures contracts based on interest rates. The Contracts embeds the economics of a collateralized over-the-counter interest rate swap into a single futures price. The Contracts are independently marked-to-market and settled every day by the Chicago Mercantile Exchange, Inc. ("CME Clearing") based on data from the overall interest rate market. The Contracts do not have periodic cash flows like over the counter ("OTC") swaps, but replicate the economics of accrued and expected cash flows in the futures price, resulting in cash transfers through the daily variation margin process.

The Contracts embed the economics of a collateralized over-the-counter interest rate swap into a single futures price. The value of the Contracts, or the Daily Settlement Price (Futures-Style Price), 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 dollar LIBOR, over a term to maturity. There are four components to each Contract's value: (1) the 100 basis price is; (2) added to the net present value (NPV) of the future cash flows at the time of settlement; (3) plus the value of historical fixed and floating swap payments; (4) minus the accumulated interest paid on variation margin referred to as Price Alignment Interest, PAI, or Eris PAI<sup>TM</sup>.

For additional information, detailed contract specifications are attached hereto at Exhibit A.

#### 2. <u>Core Principle Compliance</u>

#### Core Principle 2 – Compliance with Rules

The Exchange will continue to comply with Core Principle 2 for the following reasons. First, impartial access to the Exchange, and thus trading of the Contracts by Participants, is governed by Chapter 3 and Rule 207 of the Eris Exchange Rulebook (the "Rulebook"), which establishes the Exchange Participant Committee. Under Rule 207 the "Exchange Participant Committee shall not, and shall not permit the Exchange to, restrict access or impose burdens on access in a discriminatory manner, within each category or class of Participants or between similarly-situated categories or classes of Participants." Likewise, under Rule 314, any person initiating or executing a transaction in the Contract consents to the jurisdiction of the Exchange.

Moreover, abusive trading practices in the Contract are prohibited by Chapter 5 of the Rulebook. The Rulebook is enforced by the Exchange's Market Regulation Department, and under agreement with the National Futures Association. Chapter 7 of the Rulebook sets forth the rules governing both the investigations and prosecutions of Rule violations. Pursuant to Rule 208, the Regulatory Oversight Committee (1) ensures that the Market Regulation Department has sufficient resources to perform its obligations, and (2) oversees the Exchange's regulatory program.

Additionally, Chapter 4 provides the Exchange with the ability and authority to obtain any information necessary to perform its obligations under Core Principle 2 and under Rule 215 the Exchange has the authority carry out information sharing agreements.

#### Core Principle 3 – Contracts Not Readily Subject to Manipulation

The cash settlement of the Contracts upon expiration ensures the Contracts are not readily subject to

manipulation or distortion. The final settlement price is determined by the accumulation of fixed and floating payments made during the life of the contract (inclusive of Eris PAI), with such floating payments based on LIBOR fixings that are determined by market factors external to trading on Eris Exchange, as administered by the third-party ICE Benchmark Administration (IBA). Because there is no reliance on delivery of a commodity with limited available supply, there is no basis on which a would-be wrongdoer would be able to manipulate or squeeze or congest a futures contract final settlement, or attempt to do so.

#### Core Principle 4 – Prevention of Market Distortion

Chapter 5 of the Rulebook prohibits Participants from manipulating, distorting the price of, and disrupting the cash settlement process of the Contracts. Such Rulebook provisions are enforced by the Market Regulation Department.

#### Core Principle 5 - Position Limits or Accountability

Pursuant to Rule 533, the reportable level for each discrete commodity code of the Contracts is 3000 contracts and position accountability for each discrete commodity code of the Contracts is 6000 contracts.

#### Core Principle 7 - Availability of General Information

The Exchange will publish on its website, <u>www.erisfutures.com</u>, and in its Rulebook accurate information concerning the terms and conditions of the Contracts.

#### Core Principle 8 – Daily Publication of Trading Information

The Exchange will publish on its website, <u>www.erisfutures.com</u>, daily trading volume, open interest, and price information pertaining to the Contracts.

#### Core Principle 9 – Execution of Transactions

The Contracts will be listed for trading on Eris SwapBook, which provides for efficient, competitive, and open execution of transactions. All trades must be executed on Eris SwapBook unless executed pursuant to and in conformance with Rulebook Chapter 6 (Privately Negotiated Transactions).

#### Core Principle 10 – Trade Information

Pursuant to Exchange Procedures, all information pertaining to trading of the Contracts will be retained in a manner that enables the Exchange to use the information to assist in the prevention of customer and market abuses and to provide evidence of any violations of the rules of the contract market.

#### Core Principle 11 – Financial Integrity of Transactions

The Contracts will be cleared by CME Clearinghouse, which is a registered derivatives clearing organization. Exchange Rulebook Chapter, and Exchange Rules 404, 408, and 215 ensure the financial integrity of futures commission merchants and introducing brokers as well as the protection of customer funds, to the extent that such entities and funds are associated with the trading the Contract.

#### Core Principle 12 - Protection of Markets and Market Participants

Chapter 5 of the Rulebook establishes rules to protect Participants who trade the Contracts from abusive practices by parties, including those operating as agents of the Participants and promotes fair and equitable trading in the Contracts. The Exchange's Market Regulation Department, in conjunction with the National Futures Association, routinely monitors and surveils trading activity.

#### Core Principle 13 – Disciplinary Procedures

Chapter 7 of the Rulebook sets forth the rules related to the investigation and prosecution of potential rule violations in the trading of the Contracts. Additionally, Chapter 7 sets forth potential sanctions for rule violations.

#### Conclusion

The Exchange certifies that the listing of the Contracts complies with the Act and rules thereunder. The Exchange certifies that this submission has been concurrently posted on the Exchange's website at <a href="http://www.erisfutures.com/cftc-submissions">http://www.erisfutures.com/cftc-submissions</a>.

In the event that you have questions, please contact me at the information below.

Sincerely,

Laurian Cristea

Chief Regulatory Officer, and Head of Legal and Regulatory Affairs

laurian.cristea@erisfutures.com

T 646.961.4487

#### **Exhibit A**

#### **Product Specifications for**

2Y Eris Standard Ultra Forward Swap Future; 3Y Eris Standard Ultra Forward Swap Future; 4Y Eris Standard Ultra Forward Swap Future; 5Y Eris Standard Ultra Forward Swap Future; 7Y Eris Standard Ultra Forward Swap Future; 10Y Eris Standard Ultra Forward Swap Future; 12Y Eris Standard Ultra Forward Swap Future; 15Y Eris Standard Ultra Forward Swap Future; 20Y Eris Standard Ultra Forward Swap Future Contracts



Trading Hours	Regular Trading Hours (RTH):		
Contract Structure	Monday – Friday; 7:00 am to 5:00 pm Eastern Time  \$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 UF Stnd <month> <yyyy-yyyy>, where "UF" represents "Ultra Forward", <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 Ultra Forward Standard with an Effective Date in September 2016 and a Maturity Date in September 2018 will have a Contract Short Name of "2Y UF Stnd Sep 2016-2018"</yyyy-yyyy></month></yyyy-yyyy></month>		
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain static throughout the life of the contract		
	<ul> <li>The Fixed Rate will be set in increments of 0.25% beginning from 0.125%</li> </ul>		
Contract Size	1 Contract = 1 lot = \$100,000 face		
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed		
Swap Futures Leg Conventions	Fixed Leg  Reset Frequency Day Count Convention Currency Holiday Calendar(s) Business Day Convention Business Day Convention Reset Frequency Day Count Convention Currency Holiday Calendar(s) Reset Frequency Day Count Convention Currency Holiday Calendar(s)  Reset Frequency Day Convention Reset Frequency Day Convention New York, London  Reset Frequency Holiday Calendar(s)  New York, London  Reset Frequency Holiday Calendar(s)  Reset Frequency Day Convention  Reset Frequency Holiday Calendar(s)  Reset Frequency Holiday Calendar(s)		
	<ul> <li>Business Day Convention Modified Following with adjustment to period end dates</li> </ul>		
Contract Months	The next contract will be listed on the first business day of the month immediately following a quarterly month such that there will always be contracts listed with the next 21 forward starting quarterly Effective Dates (beginning with Sep 2016) and with the		



	41 <sup>st</sup> forward starting quarterly Effective Date	
	January January	
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 09/21/2016 and a tenor of 2 years implies a Cash Flow Alignment Date of 09/21/2018. 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 <sup>™</sup> 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	



• For example, if the CFAD is 09/21/2018, the Reset Dates will be on the 21 <sup>st</sup> 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.  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)  Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.  The settlement value for each Contract is defined as: S₁ = 100 + A₁ + B₁ - C₁ S₁ = settlement price at time t A₁ = net present value of the future cash flows at time t, based on OIS discounting B₁ = value of the historical fixed and floating amounts since contract inception  C₁ = Eris Price Alignment Interest (or Eris PAI™).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  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.  Final Settlement Price  Snnal = Settlement price at maturity B <sub>linal</sub> = Settlement price at maturity B <sub>linal</sub> = Settlement price at maturity C <sub>final</sub> = Eris PAI™, at maturity C <sub>final</sub> = Eris PAI™, at maturity		determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.		
business day preceding the Maturity Date.  First LIBOR Fixing 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)  Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.  The settlement value for each Contract is defined as:  S1 = 100 + A1 + B1 - C1  S1 = settlement price at time t  A1 = net present value of the future cash flows at time t, based on OIS discounting  B1 = value of the historical fixed and floating amounts since contract inception  C1 = Eris Price Alignment Interest (or Eris PAITM).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  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.  Final Settlement Price  S1 = 100+B1 final Final Final Final Settlement Price at maturity S1 = Settlement Price and floating amounts since contract inception through maturity		will be on the 21st of December, March, June and		
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         3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).           Daily Settlement Price (Futures-Style Price)         Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.           The settlement value for each Contract is defined as: S₁ = 100 + A₁ + B₁ - C₁ S₁ = settlement price at time t A₁ = net present value of the future cash flows at time t, based on OIS discounting B₁ = value of the historical fixed and floating amounts since contract inception C₁ = Eris Price Alignment Interest (or Eris PAI™).           Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).         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.           Final Settlement Price         Sfinal = 100+B <sub>linar</sub> C <sub>linal</sub> Stitled and floating amounts since contract inception through maturity	Last Trading Day	1 · · · · · · · · · · · · · · · · · · ·		
Floating Rate Index  3 Month USD LIBOR announced by the ICE Benchmark Administration Limited (IBA).  Daily Settlement Price (Futures-Style Price)  Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.  The settlement value for each Contract is defined as:  St = 100 + At + Bt - Ct St = settlement price at time t At = net present value of the future cash flows at time t, based on OIS discounting  Bt = value of the historical fixed and floating amounts since contract inception  Ct = Eris Price Alignment Interest (or Eris PAI <sup>TM</sup> ).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  Eris PAI <sup>TM</sup> 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 <sup>TM</sup> will start accruing on the first listing date.  Final Settlement Price  Sinal = 100+Binal Cfinal Sinal = Settlement price at maturity Binal = Historical fixed and floating amounts since contract inception through maturity	_	2 London business days prior to the Effective Date.		
Administration Limited (IBA).  Daily Settlement Price (Futures-Style Price)  Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.  The settlement value for each Contract is defined as:  St = 100 + At + Bt - Ct St = settlement price at time t At = net present value of the future cash flows at time t, based on OIS discounting  Bt = value of the historical fixed and floating amounts since contract inception  Ct = Eris Price Alignment Interest (or Eris PAI <sup>TM</sup> ).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  Eris PAI <sup>TM</sup> 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 <sup>TM</sup> will start accruing on the first listing date.  Final Settlement Price  Sinal = 100+Binal - Cfinal Sfinal = Settlement price at maturity Bfinal = Historical fixed and floating amounts since contract inception through maturity	_			
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overnight fed funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris $PAI^{TM}$ will start accruing on the first listing date.  Final Settlement Price $S_{\textit{final}} = 100 + B_{\textit{final}} - C_{\textit{final}} \\ S_{\textit{final}} = Settlement price at maturity \\ B_{\textit{final}} = Historical fixed and floating amounts since contract inception through maturity}$				
$ \begin{array}{ c c c c c c } \hline \textbf{Final Settlement Price} & S_{\textit{final}} & = & 100 + B_{\textit{final}} \\ S_{\textit{final}} & = & Settlement price at maturity \\ B_{\textit{final}} & = & Historical fixed and floating amounts since } \\ & & contract inception through maturity \\ \hline                                  $		overnight fed funds effective rate to the contract's NPV, using an Actual/360 day-count convention. Eris PAI <sup>TM</sup> will start accruing		
B <sub>final</sub> = Historical fixed and floating amounts since contract inception through maturity	Final Settlement Price	$S_{final} = 100 + B_{final} C_{final}$		
contract inception through maturity				
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Quoting Convention	Net Present Value (NPV) per Contract will be used for trade execution.
	NPV is expressed in per contract terms for the Buyer (fixed rate payer).
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of
	Trade Price = $100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.
	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.
	The NPV per Contract can be negotiated in the following increments/tick sizes:
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> </ul>
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.
	Block Trades may be executed at any time, including times in which the public auction market is closed.
	Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.
	Current block trade thresholds are as follows and are subject to change:
	<ul> <li>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</li> </ul>



	the leg with the shortest Remaining Tenor.		
		Minimum	Block Size
	Remaining Tenor	Trading Hours: RTH	Trading Hours: OTH
	Less than 5 years	\$10mm notional 100 contracts	\$1.0mm notional 10 contracts
	5 years or more	\$10mm notional 100 contracts	\$0.5mm notional 5 contracts
	price, quantity) im	publicly report all Block mediately upon success arty reporting the trade.	
Exchange of Derivatives for Related Positions	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 exthe public auction	xecuted at any time, inc market is closed.	cluding times in which
	EDRPs must be Exchange Rulebo	•	Rule 602 in the Eris
	There are no minimum quantity thresholds required for EDRP's.		
	trading day; howe	•	
Ticker Symbol Convention	Maturity Code (Period Code) will be YYYYMMDD Product Code: ZA9202		
	Product Code of Z		Standard Contract with ate of 09/21/18 will have
Listed Spreads	-		composed of Standard pBook Discrete Spread



Trading Hours	Regular Trading Hours (RTH):		
Contract Structure	Monday – Friday; 7:00 am to 5:00 pm Eastern Time  \$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	3 Years		
Contract Short Name	3Y UF Stnd <month> <yyyy-yyyy>, where "UF" represents "Ultra Forward", <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 3Y Ultra Forward Standard with an Effective Date in September 2016 and a Maturity Date in September 2019 will have a Contract Short Name of "3Y UF Stnd Sep 2016-2019"</yyyy-yyyy></month></yyyy-yyyy></month>		
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain static throughout the life of the contract		
	<ul> <li>The Fixed Rate will be set in increments of 0.25% beginning from 0.125%</li> </ul>		
Contract Size	1 Contract = 1 lot = \$100,000 face		
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed		
Swap Futures Leg Conventions	Fixed Leg  Reset Frequency Day Count Convention Currency Holiday Calendar(s) Business Day Convention Reset Frequency Pay Count Convention Currency Day Count Convention Currency Holiday Calendar(s) Business Day Convention Currency Holiday Calendar(s) Business Day Convention Modified Following with adjustment to period end dates  Floating Leg Quarterly Actual/360 USD New York, London New York, London Modified Following with adjustment to period end		
Contract Mantha	dates		
Contract Months	The next contract will be listed on the first business day of the month immediately following a quarterly month such that there will always be contracts listed with the next 21 forward starting quarterly Effective Dates (beginning with Sep 2016) and with the		



	41 <sup>st</sup> forward starting quarterly Effective Date	
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 3 Years to the Effective Date.	
	For example, an Eris Interest Rate Swap Future with an Effective Date of 09/21/2016 and a tenor of 3 years implies a Cash Flow Alignment Date of 09/21/2019. 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.	
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 <sup>™</sup> 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	



	determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.		
	<ul> <li>For example, if the CFAD is 09/21/2019, the Reset Dates will be on the 21<sup>st</sup> of December, March, June and September, subject to the Modified Following convention.</li> </ul>		
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)	Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.		
	The settlement value for each Contract is defined as:		
	$S_t = 100 + A_t + B_t - C_t$ $S_t = $ settlement price at time t		
	A <sub>t</sub> = net present value of the future cash flows at		
	time t, based on OIS discounting		
	B <sub>t</sub> = value of the historical fixed and floating amounts		
	since contract inception		
	$C_t$ = Eris Price Alignment Interest (or Eris PAI <sup>TM</sup> ).		
	Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).		
	Eris PAI <sup>TM</sup> 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 <sup>TM</sup> will start accruing on the first listing date.		
Final Settlement Price	$S_{final} = 100 + B_{finar} C_{final}$		
	S <sub>final</sub> = Settlement price at maturity   B <sub>final</sub> = Historical fixed and floating amounts since		
	B <sub>final</sub> = Historical fixed and floating amounts since contract inception through maturity		
	$C_{\text{final}}$ = Eris PAI <sup>TM</sup> , at maturity		



Quoting Convention	Net Present Value (NPV) per Contract will be used for trade execution.	
	NPV is expressed in per contract terms for the Buyer (fixed rate payer).	
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of	
	Trade Price = $100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.	
	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.	
	The NPV per Contract can be negotiated in the following increments/tick sizes:	
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> </ul>	
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.	
	Block Trades may be executed at any time, including times in which the public auction market is closed.	
	Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.	
	Current block trade thresholds are as follows and are subject to change:	
	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.		
		Minimum	Block Size
	Remaining Tenor	Trading Hours: RTH	Trading Hours: OTH
	Less than 5 years	\$10mm notional 100 contracts	\$1.0mm notional 10 contracts
	5 years or more	\$10mm notional 100 contracts	\$0.5mm notional 5 contracts
	price, quantity) im	publicly report all Block mediately upon success arty reporting the trade.	
Exchange of Derivatives for Related Positions	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 exthe public auction	xecuted at any time, inc market is closed.	cluding times in which
	EDRPs must be Exchange Rulebo	•	Rule 602 in the Eris
	There are no minimum quantity thresholds required for EDRP's.		
	trading day; howe	•	
Ticker Symbol Convention	Maturity Code (Period Code) will be YYYYMMDD Product Code: ZB9203		
	Product Code of Z		Standard Contract with ate of 09/21/19 will have
Listed Spreads	- `		composed of Standard pBook Discrete Spread



Trading Hausa	Describer Trading House (DTII):		
Trading Hours	Regular Trading Hours (RTH):		
0	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	4 Years		
Tenor			
Contract Short Name	4Y UF Stnd <month> <yyyy-yyyy>, where "UF" represents</yyyy-yyyy></month>		
	"Ultra Forward", <month> will be the first three characters of the</month>		
	month of the Effective Date and <yyyy-yyyy> will represent</yyyy-yyyy>		
	the year of the Effective Date and the year of the Maturity Date		
	For example, the 4Y Ultra Forward Standard with an Effective		
	Date in September 2016 and a Maturity Date in September 2020		
	will have a Contract Short Name of "4Y UF Stnd Sep 2016-2020"		
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain		
	static throughout the life of the contract		
	<ul> <li>The Fixed Rate will be set in increments of 0.25%</li> </ul>		
	beginning from 0.125%		
Contract Size	1 Contract = 1 lot = \$100,000 face		
Trading Conventions	Buy = Pay Fixed		
Trading Conventions	Sell = Receive Fixed		
Swap Futures Leg	Fixed Leg		
Conventions	Reset Frequency     Semi-Annual		
	1 ,		
	Currency     USD     New Yorks Lander		
	Holiday Calendar(s)     New York, London		
	Business Day Convention Modified Following with		
	adjustment to period end		
	dates		
	Floating Leg		
	Reset Frequency     Quarterly		
	Day Count Convention Actual/360		
	Currency USD		
	<ul> <li>Holiday Calendar(s)</li> <li>New York, London</li> </ul>		
	Business Day Convention Modified Following with		
	adjustment to period end		
	dates		
Contract Months	The next contract will be listed on the first business day of the		
	month immediately following a quarterly month such that there		
	will always be contracts listed with the next 21 forward starting		
	quarterly Effective Dates (beginning with Sep 2016) and with the		



	41 <sup>st</sup> forward starting quarterly Effective Date	
	January January	
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 4 Years to the Effective Date.	
	For example, an Eris Interest Rate Swap Future with an Effective Date of 09/21/2016 and a tenor of 4 years implies a Cash Flow Alignment Date of 09/21/2020. 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 <sup>™</sup> 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	



	determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.	
	<ul> <li>For example, if the CFAD is 09/21/2020, the Reset Dates will be on the 21<sup>st</sup> of December, March, June and September, subject to the Modified Following convention.</li> </ul>	
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)	Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.	
	The settlement value for each Contract is defined as:	
	$S_t = 100 + A_t + B_t - C_t$ $S_t = $ settlement price at time t	
	S <sub>t</sub> = settlement price at time t   A <sub>t</sub> = net present value of the future cash flows at	
	time t, based on OIS discounting	
	B <sub>t</sub> = value of the historical fixed and floating amounts	
	since contract inception	
	$C_t$ = Eris Price Alignment Interest (or Eris PAI <sup>TM</sup> ).	
	Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).	
	Eris PAI <sup>TM</sup> 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 <sup>TM</sup> will start accruing on the first listing date.	
Final Settlement Price	$S_{final} = 100 + B_{final} C_{final}$	
	S <sub>final</sub> = Settlement price at maturity	
	B <sub>final</sub> = Historical fixed and floating amounts since contract inception through maturity	
	$C_{final}$ = Eris PAI <sup>TM</sup> , at maturity	



Quoting Convention	Net Present Value (NPV) per Contract will be used for trade execution.
	NPV is expressed in per contract terms for the Buyer (fixed rate payer).
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of
	Trade Price = $100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.
	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.
	The NPV per Contract can be negotiated in the following increments/tick sizes:
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> <li>\$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.</li> </ul>
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.
	Block Trades may be executed at any time, including times in which the public auction market is closed.
	Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.
	Current block trade thresholds are as follows and are subject to change:



	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.		
	Minimum Block Size		
	Remaining Tenor	Trading Hours: RTH	Trading Hours: OTH
	Less than 5 years	\$10mm notional 100 contracts	\$1.0mm notional 10 contracts
	5 years or more	\$10mm notional 100 contracts	\$0.5mm notional 5 contracts
	price, quantity) important details from the pa	publicly report all Block mediately upon success arty reporting the trade.	sful receipt of the trade
Exchange of Derivatives for Related Positions	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.		
	EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.		
	There are no minimum quantity thresholds required for EDRP's.		
	trading day; howe	•	
Ticker Symbol Convention	Maturity Code (Period Code) will be YYYYMMDD Product Code: ZB9204		
		B204 and Maturity Date	Standard Contract with e of 09/21/20 will have a
Listed Spreads			composed of Standard pBook Discrete Spread



Trading Hours	Regular Trading Hours (RTH):	
Contract Structure	Monday – Friday; 7:00 am to 5:00 pm Eastern Time  \$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 UF Stnd <month> <yyyy-yyyy>, where "UF" represents "Ultra Forward", <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 Ultra Forward Standard with an Effective Date in September 2016 and a Maturity Date in September 2021 will have a Contract Short Name of "5Y UF Stnd Sep 2016-2021"</yyyy-yyyy></month></yyyy-yyyy></month>	
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain static throughout the life of the contract	
	<ul> <li>The Fixed Rate will be set in increments of 0.25% beginning from 0.125%</li> </ul>	
Contract Size	1 Contract = 1 lot = \$100,000 face	
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed	
Swap Futures Leg Conventions	Fixed Leg  Reset Frequency Day Count Convention Currency Holiday Calendar(s) Business Day Convention Reset Frequency Reset Frequency Day Count Convention Currency Day Count Convention Currency Holiday Calendar(s) Business Day Convention Reset Frequency Day Count Convention Currency Holiday Calendar(s) Business Day Convention Modified Following with New York, London Modified Following with	
	adjustment to period end dates	
Contract Months	The next contract will be listed on the first business day of the month immediately following a quarterly month such that there will always be contracts listed with the next 21 forward starting quarterly Effective Dates (beginning with Sep 2016) and with the	



	41 <sup>st</sup> forward starting quarterly Effective Date	
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 5 Years to the Effective Date.	
	For example, an Eris Interest Rate Swap Future with an Effective Date of 09/21/2016 and a tenor of 5 years implies a Cash Flow Alignment Date of 09/21/2021. 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 <sup>™</sup> 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	



	determining Reset Dates. Each Reset Date is subject to		
	adjustment based on Modified Following convention.		
	<ul> <li>For example, if the CFAD is 09/21/2021, the Reset Dates will be on the 21<sup>st</sup> day of December, March, June and September, subject to the Modified Following convention.</li> </ul>		
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)	Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.		
	The settlement value for each Contract is defined as:  St = 100 + At + Bt - Ct  St = settlement price at time t  At = net present value of the future cash flows at time t, based on OIS discounting  Bt = value of the historical fixed and floating amounts since contract inception  Ct = Eris Price Alignment Interest (or Eris PAI <sup>TM</sup> ).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  Eris PAI <sup>TM</sup> 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 <sup>TM</sup> will start accruing on the first listing date.		
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ $S_{final} = Settlement price at maturity$ $B_{final} = Historical fixed and floating amounts since$		
	contract inception through maturity $C_{final} = \text{Eris PAI}^{TM}, \text{ at maturity}$		



Quoting Convention	Net Present Value (NPV) per Contract will be used for trade execution.
	NPV is expressed in per contract terms for the Buyer (fixed rate payer).
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of
	Trade Price = $100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.
	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.
	The NPV per Contract can be negotiated in the following increments/tick sizes:
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> <li>\$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.</li> </ul>
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.
	Block Trades may be executed at any time, including times in which the public auction market is closed.
	Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.
	Current block trade thresholds are as follows and are subject to change:



	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.		
	Minimum Block Size		Block Size
	Remaining Tenor	Trading Hours: RTH	Trading Hours: OTH
	Less than 5 years	\$10mm notional 100 contracts	\$1.0mm notional 10 contracts
	5 years or more	\$10mm notional 100 contracts	\$0.5mm notional 5 contracts
	price, quantity) important details from the pa	publicly report all Block mediately upon success arty reporting the trade.	sful receipt of the trade
Exchange of Derivatives for Related Positions	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.		
	EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.		
	There are no minimum quantity thresholds required for EDRP's.		
	trading day; howe	•	
Ticker Symbol Convention	Maturity Code (Period Code) will be YYYYMMDD Product Code: ZB9205		
	Product Code of Z		Standard Contract with ate of 09/21/21 will have
Listed Spreads		• • •	composed of Standard pBook Discrete Spread



Trading Haura	Deculer Tradica House (DTI):	
Trading Hours	Regular Trading Hours (RTH):	
0 1 2 1 2 1	Monday – Friday; 7:00 am to 5:00 pm Eastern Time  \$100,000 notional principal whose value is based upon the	
Contract Structure	· · · · · · · · · · · · · · · · · · ·	
	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	7 Years	
Tenor		
Contract Short Name	7Y UF Stnd <month> <yyyy-yyyy>, where "UF" represents</yyyy-yyyy></month>	
	"Ultra Forward", <month> will be the first three characters of the</month>	
	month of the Effective Date and <yyyy-yyyy> will represent</yyyy-yyyy>	
	the year of the Effective Date and the year of the Maturity Date	
	For example, the 7Y Ultra Forward Standard with an Effective	
	Date in September 2016 and a Maturity Date in September 2023	
	will have a Contract Short Name of "7Y UF Stnd Sep 2016-2023"	
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain	
Tixod Nato	static throughout the life of the contract	
	The Fixed Rate will be set in increments of 0.25%  beginning from 0.135%	
Contract Size	beginning from 0.125%  1 Contract = 1 lot = \$100,000 face	
Contract Size	1 Contract = 1 lot = \$100,000 face	
Trading Conventions	Buy = Pay Fixed	
	Sell = Receive Fixed	
Swap Futures Leg	Fixed Leg	
Conventions	Reset Frequency     Semi-Annual	
	<ul> <li>Day Count Convention 30/360</li> </ul>	
	Currency USD	
	Holiday Calendar(s)     New York, London	
	Business Day Convention Modified Following with	
	adjustment to period end dates	
	Floating Leg	
	Reset Frequency Quarterly  Astro-Vices	
	Day Count Convention Actual/360	
	Currency     USD	
	<ul> <li>Holiday Calendar(s)</li> <li>New York, London</li> </ul>	
	<ul> <li>Business Day Convention Modified Following with</li> </ul>	
	adjustment to period end	
	dates	
Contract Months	The next contract will be listed on the first business day of the	
	month immediately following a quarterly month such that there	
	will always be contracts listed with the next 21 forward starting	
	quarterly Effective Dates (beginning with Sep 2016) and with the	



	41 <sup>st</sup> forward starting quarterly Effective Date	
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 7 Years to the Effective Date.	
	For example, an Eris Interest Rate Swap Future with an Effective Date of 09/21/2016 and a tenor of 7 years implies a Cash Flow Alignment Date of 09/21/2023. 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 <sup>™</sup> 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	



	determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.	
	<ul> <li>For example, if the CFAD is 09/21/2023, the Reset Dates will be on the 21<sup>st</sup> day of December, March, June and September, subject to the Modified Following convention.</li> </ul>	
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)	Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.	
	The settlement value for each Contract is defined as:	
	$S_t = 100 + A_t + B_t - C_t$ $S_t = $ settlement price at time t	
	A <sub>t</sub> = net present value of the future cash flows at	
	time t, based on OIS discounting	
	B <sub>t</sub> = value of the historical fixed and floating amounts	
	since contract inception $C_t = \text{Eris Price Alignment Interest (or Eris PAI}^{TM}).$	
	Of End i noc / lightnone interest (of End i / ii ).	
	Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).	
	Eris PAI <sup>TM</sup> 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 <sup>TM</sup> will start accruing on the first listing date.	
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$	
	S <sub>final</sub> = Settlement price at maturity   B <sub>final</sub> = Historical fixed and floating amounts since	
	B <sub>final</sub> = Historical fixed and floating amounts since contract inception through maturity	
	$C_{final}$ = Eris PAI <sup>TM</sup> , at maturity	



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Quoting Convention	Net Present Value (NPV) per Contract will be used for trade execution.
	NPV is expressed in per contract terms for the Buyer (fixed rate payer).
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of
	$\label{eq:TradePrice} Trade\ Price = 100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.
	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.
	The NPV per Contract can be negotiated in the following increments/tick sizes:
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> <li>\$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.</li> <li>\$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years.</li> </ul>
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to
	Eris Exchange.  Block Trades may be executed at any time, including times in which the public auction market is closed.
	Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.



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	Current block trade thresholds are as follows and are subject to change:  • 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.		
	Minimum Block Size		
	Remaining Tenor	Trading Hours: RTH	Trading Hours: OTH
	Less than 5 years	\$10mm notional 100 contracts	\$1.0mm notional 10 contracts
	5 years or more	\$10mm notional 100 contracts	\$0.5mm notional 5 contracts
	price, quantity) imi	publicly report all Block mediately upon success arty reporting the trade.	
Exchange of Derivatives for Related Positions	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.		
	EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.		
	There are no minimum quantity thresholds required for EDRP's.		
	trading day; however		
Ticker Symbol Convention	Maturity Code (Period Code) will be YYYYMMDD Product Code: ZC9207		
	Product Code of Z		Standard Contract with ate of 09/21/23 will have
Listed Spreads			composed of Standard pBook Discrete Spread



Trading Hours	Pogular Trading Hours (PTH):		
Trading Hours	Regular Trading Hours (RTH):		
0	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	10 Years		
Tenor			
Contract Short Name	10Y UF Stnd <month> <yyyy-yyyy>, where "UF" represents</yyyy-yyyy></month>		
	"Ultra Forward", <month> will be the first three characters of the</month>		
	month of the Effective Date and <yyyy-yyyy> will represent</yyyy-yyyy>		
	the year of the Effective Date and the year of the Maturity Date		
	For example, the 10Y Ultra Forward Standard with an Effective		
	Date in September 2016 and a Maturity Date in September 2026		
	will have a Contract Short Name of "10Y UF Stnd Sep 2016-		
	2026"		
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain		
	static throughout the life of the contract		
	The Fixed Rate will be set in increments of 0.25%		
	beginning from 0.125%		
Contract Size	1 Contract = 1 lot = \$100,000 face		
Trading Conventions	Buy = Pay Fixed		
_	Sell = Receive Fixed		
Swap Futures Leg	Fixed Leg		
Conventions	Reset Frequency     Semi-Annual		
	<ul> <li>Day Count Convention 30/360</li> </ul>		
	Currency USD		
	Holiday Calendar(s)     New York, London		
	Business Day Convention Modified Following with		
	adjustment to period end		
	dates		
	Floating Leg		
	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		
Contract Months	The next contract will be listed on the first business day of the		
	month immediately following a quarterly month such that there		
	will always be contracts listed with the next 21 forward starting		



	quarterly Effective Dates (beginning with Sep 2016) and with the 41 <sup>st</sup> forward starting quarterly Effective Date
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 10 Years to the Effective Date.
	For example, an Eris Interest Rate Swap Future with an Effective Date of 09/21/2016 and a tenor of 10 years implies a Cash Flow Alignment Date of 09/21/2026. 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 <sup>™</sup> 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.
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	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.  • For example, if the CFAD is 09/21/2026, the Reset Dates will be on the 21 <sup>st</sup> day 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)	Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.  The settlement value for each Contract is defined as:  S <sub>t</sub> = 100 + A <sub>t</sub> + B <sub>t</sub> - C <sub>t</sub> S <sub>t</sub> = settlement price at time t  A <sub>t</sub> = net present value of the future cash flows at time t, based on OIS discounting  B <sub>t</sub> = value of the historical fixed and floating amounts since contract inception  C <sub>t</sub> = Eris Price Alignment Interest (or Eris PAI <sup>TM</sup> ).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  Eris PAI <sup>TM</sup> 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 <sup>TM</sup> will start accruing on the first listing date.		
Final Settlement Price	$S_{final} = 100 + B_{final} - C_{final}$ $S_{final} = Settlement price at maturity$ $B_{final} = Historical fixed and floating amounts since contract inception through maturity C_{final} = Eris PAI^{TM}, at maturity$		



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Quoting Convention	Net Present Value (NPV) per Contract will be used for trade execution.
	NPV is expressed in per contract terms for the Buyer (fixed rate payer).
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of
	$\label{eq:TradePrice} Trade\ Price = 100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.
	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.
	The NPV per Contract can be negotiated in the following increments/tick sizes:
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> <li>\$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.</li> <li>\$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years.</li> </ul>
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to
	Eris Exchange.  Block Trades may be executed at any time, including times in which the public auction market is closed.
	Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.



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	Current block trade thresholds are as follows and are subject to change:  • 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.		
	Minimum Block Size		
	Remaining Tenor	Trading Hours: RTH	Trading Hours: OTH
	Less than 5 years	\$10mm notional 100 contracts	\$1.0mm notional 10 contracts
	5 years or more	\$10mm notional 100 contracts	\$0.5mm notional 5 contracts
	price, quantity) imi	publicly report all Block mediately upon success arty reporting the trade.	
Exchange of Derivatives for Related Positions	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.		
	EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.		
	There are no minimum quantity thresholds required for EDRP's.		
	trading day; however		
Ticker Symbol Convention	Maturity Code (Period Code) will be YYYYMMDD Product Code: ZC9210		
	Product Code of Z		Standard Contract with ate of 09/21/26 will have
Listed Spreads			composed of Standard pBook Discrete Spread



Trading Hours	Regular Trading Hours (RTH):		
Contract Structure	Monday – Friday; 7:00 am to 5:00 pm Eastern Time \$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	12 Years		
Contract Short Name	12Y UF Stnd <month> <yyyy-yyyy>, where "UF" represents "Ultra Forward", <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 12Y Ultra Forward Standard with an Effective Date in September 2016 and a Maturity Date in September 2028 will have a Contract Short Name of "12Y UF Stnd Sep 2016-2028"</yyyy-yyyy></month></yyyy-yyyy></month>		
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain static throughout the life of the contract  • The Fixed Rate will be set in increments of 0.25% beginning from 0.125%		
Contract Size	1 Contract = 1 lot = \$100,000 face		
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed		
Swap Futures Leg Conventions	Fixed Leg     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Business Day Convention  Floating Leg     Reset Frequency     Day Count Convention     Currency     Day Count Convention     Currency     Holiday Calendar(s)     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Business Day Convention     Modified Following with adjustment to period end dates		
Contract Months	The next contract will be listed on the first business day of the month immediately following a quarterly month such that there will always be contracts listed with the next 21 forward starting		



	quarterly Effective Dates (beginning with Sep 2016) and with the 41 <sup>st</sup> forward starting quarterly Effective Date
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 12 Years to the Effective Date.
	For example, an Eris Interest Rate Swap Future with an Effective Date of 09/21/2016 and a tenor of 12 years implies a Cash Flow Alignment Date of 09/21/2028. 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 <sup>™</sup> 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 determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.  • For example, if the CFAD is 09/21/2028, the Reset Dates will be on the 21 <sup>st</sup> day 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)	Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.  The settlement value for each Contract is defined as:  St = 100 + At + Bt - Ct St = settlement price at time t At = net present value of the future cash flows at time t, based on OIS discounting  Bt = value of the historical fixed and floating amounts since contract inception  Ct = Eris Price Alignment Interest (or Eris PAI™).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  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.		
Final Settlement Price	$S_{\mathit{final}} = 100 + B_{\mathit{finar}} C_{\mathit{final}}$ $S_{\mathit{final}} = Settlement price at maturity$ $B_{\mathit{final}} = Historical fixed and floating amounts since contract inception through maturity C_{\mathit{final}} = Eris PAI^{TM}, at maturity$		



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Quoting Convention	Net Present Value (NPV) per Contract will be used for trade execution.
	NPV is expressed in per contract terms for the Buyer (fixed rate payer).
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of
	$\label{eq:TradePrice} Trade\ Price = 100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.
	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.
	The NPV per Contract can be negotiated in the following increments/tick sizes:
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> <li>\$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.</li> <li>\$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years.</li> </ul>
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to
	Eris Exchange.  Block Trades may be executed at any time, including times in which the public auction market is closed.
	Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.



	<u> </u>		
	Current block trade thresholds are as follows and are subject to change:  • 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.		
	Minimum Block Size		
	Remaining Tenor	Trading Hours: RTH	Trading Hours: OTH
	Less than 5 years	\$10mm notional 100 contracts	\$1.0mm notional 10 contracts
	5 years or more	\$10mm notional 100 contracts	\$0.5mm notional 5 contracts
	price, quantity) imi	publicly report all Block mediately upon success arty reporting the trade.	
Exchange of Derivatives for Related Positions	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.		
	EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.		
	There are no minimum quantity thresholds required for EDRP's.		
	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.		
Ticker Symbol Convention	Maturity Code (Period Code) will be YYYYMMDD Product Code: ZD9212		
	Product Code of Z		Standard Contract with ate of 09/21/28 will have
Listed Spreads		•	composed of Standard pBook Discrete Spread



## 15Y Eris Standard Ultra Forward Swap Futures:

**Contract Specifications** 

Trading Hours	Regular Trading Hours (RTH):		
Contract Structure	Monday – Friday; 7:00 am to 5:00 pm Eastern Time  \$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	15 Years		
Contract Short Name	15Y UF Stnd <month> <yyyy-yyyy>, where "UF" represents "Ultra Forward", <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 15Y Ultra Forward Standard with an Effective Date in September 2016 and a Maturity Date in September 2031 will have a Contract Short Name of "15Y UF Stnd Sep 2016-2031"</yyyy-yyyy></month></yyyy-yyyy></month>		
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain static throughout the life of the contract  • The Fixed Rate will be set in increments of 0.25% beginning from 0.125%		
Contract Size	1 Contract = 1 lot = \$100,000 face		
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed		
Swap Futures Leg Conventions	Fixed Leg     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Business Day Convention  Floating Leg     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Holiday Calendar(s)     Business Day Convention     Modified     Following     Actual/360     USD     New York, London     New York, London     Modified     Following with     adjustment to period end     dates		
Contract Months	The next contract will be listed on the first business day of the month immediately following a quarterly month such that there will always be contracts listed with the next 21 forward starting		



	quarterly Effective Dates (beginning with Sep 2016) and with the 41 <sup>st</sup> forward starting quarterly Effective Date
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 15 Years to the Effective Date.
	For example, an Eris Interest Rate Swap Future with an Effective Date of 09/21/2016 and a tenor of 15 years implies a Cash Flow Alignment Date of 09/21/2031. 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 <sup>™</sup> 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.
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	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.  • For example, if the CFAD is 09/21/2031, the Reset Dates will be on the 21 <sup>st</sup> day 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)	Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.  The settlement value for each Contract is defined as:  St = 100 + At + Bt - Ct St = settlement price at time t At = net present value of the future cash flows at time t, based on OIS discounting  Bt = value of the historical fixed and floating amounts since contract inception  Ct = Eris Price Alignment Interest (or Eris PAI™).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  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.		
Final Settlement Price	$S_{\text{final}} = 100 + B_{\text{final}} C_{\text{final}}$ $S_{\text{final}} = Settlement price at maturity}$ $B_{\text{final}} = Historical fixed and floating amounts since contract inception through maturity} C_{\text{final}} = Eris PAI^{TM}, at maturity$		



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Quoting Convention	Net Present Value (NPV) per Contract will be used for trade execution.
	NPV is expressed in per contract terms for the Buyer (fixed rate payer).
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of
	$\label{eq:TradePrice} Trade\ Price = 100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.
	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.
	The NPV per Contract can be negotiated in the following increments/tick sizes:
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> <li>\$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.</li> <li>\$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years.</li> </ul>
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to
	Eris Exchange.  Block Trades may be executed at any time, including times in which the public auction market is closed.
	Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.



	Т		
	Current block trade thresholds are as follows and are subject to change:  • 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.		
	Minimum Block Size		
	Remaining Tenor	Trading Hours: RTH	Trading Hours: OTH
	Less than 5 years	\$10mm notional 100 contracts	\$1.0mm notional 10 contracts
	5 years or more	\$10mm notional 100 contracts	\$0.5mm notional 5 contracts
	price, quantity) imi	publicly report all Block mediately upon success arty reporting the trade.	
Exchange of Derivatives for Related Positions	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.		
	EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.		
	There are no minimum quantity thresholds required for EDRP's.		
	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.		
Ticker Symbol Convention	Maturity Code (Period Code) will be YYYYMMDD Product Code: ZD9215		
	Product Code of Z		Standard Contract with ate of 09/21/31 will have
Listed Spreads			composed of Standard pBook Discrete Spread



# 20Y Eris Standard Ultra Forward Swap Futures:

**Contract Specifications** 

Trading Hours	Regular Trading Hours (RTH):		
Contract Structure	Monday – Friday; 7:00 am to 5:00 pm Eastern Time  \$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	20 Years		
Contract Short Name	20Y UF Stnd <month> <yyyy-yyyy>, where "UF" represents "Ultra Forward", <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 20Y Ultra Forward Standard with an Effective Date in September 2016 and a Maturity Date in September 2036 will have a Contract Short Name of "20Y UF Stnd Sep 2016-2036"</yyyy-yyyy></month></yyyy-yyyy></month>		
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain static throughout the life of the contract  • The Fixed Rate will be set in increments of 0.25% beginning from 0.125%		
Contract Size	1 Contract = 1 lot = \$100,000 face		
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed		
Swap Futures Leg Conventions	Fixed Leg     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Business Day Convention  Floating Leg     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Holiday Calendar(s)     Business Day Convention     Modified     Following     Actual/360     USD     New York, London     New York, London     Modified     Following with     adjustment to period end     dates		
Contract Months	The next contract will be listed on the first business day of the month immediately following a quarterly month such that there will always be contracts listed with the next 21 forward starting		



	quarterly Effective Dates (beginning with Sep 2016) and with the 41 <sup>st</sup> forward starting quarterly Effective Date
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 20 Years to the Effective Date.
	For example, an Eris Interest Rate Swap Future with an Effective Date of 09/21/2016 and a tenor of 20 years implies a Cash Flow Alignment Date of 09/21/2036. 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 <sup>™</sup> 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 determining Reset Dates. Each Reset Date is subject to adjustment based on Modified Following convention.  • For example, if the CFAD is 09/21/2036, the Reset Dates will be on the 21 <sup>st</sup> day 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)	Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.  The settlement value for each Contract is defined as:  St = 100 + At + Bt - Ct St = settlement price at time t At = net present value of the future cash flows at time t, based on OIS discounting  Bt = value of the historical fixed and floating amounts since contract inception  Ct = Eris Price Alignment Interest (or Eris PAI <sup>TM</sup> ).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  Eris PAI <sup>TM</sup> 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 <sup>TM</sup> will start accruing on the first listing date.		
Final Settlement Price	$S_{final}$ = 100+ $B_{finar}$ C <sub>final</sub> $S_{final}$ = Settlement price at maturity $B_{final}$ = Historical fixed and floating amounts since contract inception through maturity $C_{final}$ = Eris PAI <sup>TM</sup> , at maturity		



Quoting Convention	Net Present Value (NPV) per Contract will be used for trade			
	execution.			
	NPV is expressed in per contract terms for the Buyer (fixed payer).			
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of			
	Trade Price = $100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.			
	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.			
	The NPV per Contract can be negotiated in the following increments/tick sizes:			
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> <li>\$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.</li> <li>\$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years.</li> <li>\$20 for Contracts where the lesser of Remaining</li> </ul>			
	Tenor/Underlying Tenor is greater than or equal to 20 years.			
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.			
	Block Trades may be executed at any time, including times in which the public auction market is closed.			



Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.

Current block trade thresholds are as follows and are subject to change:

 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.

	Minimum Block Size		
Remaining	Trading Hours: RTH Trading Hours: O		
Tenor			
Less than 5	\$10mm notional	\$1.0mm notional	
years	100 contracts	10 contracts	
5 years or more	s or more \$10mm notional \$0.5mm notion 5 contracts		

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.

# Exchange of Derivatives for Related Positions

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.

EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.

There are no minimum quantity thresholds required for EDRP's.

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.

# Ticker Symbol Convention

Maturity Code (Period Code) will be YYYYMMDD Product Code: ZD9220

For example, the 20 Year Ultra Forward Standard Contract with Product Code of ZD9220 and Maturity Date of 09/21/36 will have a ticker symbol of ZD922020360921.



Listed Spreads	Listed Spreads (or Discrete Spreads), composed of Standard
	Contracts, may be traded using the SwapBook Discrete Spread functionality.

Eris Exchange, LLC - Legal Notice 01/11/16

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

Futures trading is not suitable for all investors, and involves the risk of loss. Futures are a leveraged investment, and because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for a futures position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles. And only a portion of those funds should be devoted to any one trade because they cannot expect to profit on every trade. All references to options refer to options on futures.

Trading on Eris Exchange is limited to those persons who are "eligible contract participants" as defined in § 1a (12) of the Commodity Exchange Act.

Notice to individuals located in the United Kingdom. The materials contained in this communication are directed only at persons with investment experience (i.e., "investment professionals"). Persons who do not have professional experience in matters relating to investments should not rely on any of the information herein. The investment activities to which these materials relate are only available to persons with investment experience. Any request to engage in the investment activities to which these materials relate, by persons other than those with investment experience, shall be denied.

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All matters pertaining to rules and specifications herein are made subject to and are superseded by official Eris Exchange rules. Current rules should be consulted in all cases concerning contract specifications.

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# 30Y Eris Standard Ultra Forward Swap Futures:

**Contract Specifications** 

Trading Hours	Regular Trading Hours (RTH):		
Contract Structure	Monday – Friday; 7:00 am to 5:00 pm Eastern Time \$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	30Y UF Stnd <month> <yyyy-yyyy>, where "UF" represents "Ultra Forward", <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 30Y Ultra Forward Standard with an Effective Date in September 2016 and a Maturity Date in September 2046 will have a Contract Short Name of "30Y UF Stnd Sep 2016-2046"</yyyy-yyyy></month></yyyy-yyyy></month>		
Fixed Rate	Pre-determined rate set by Eris Exchange, which will remain static throughout the life of the contract  • The Fixed Rate will be set in increments of 0.25% beginning from 0.125%		
Contract Size	1 Contract = 1 lot = \$100,000 face		
Trading Conventions	Buy = Pay Fixed Sell = Receive Fixed		
Swap Futures Leg Conventions	Fixed Leg     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Business Day Convention  Floating Leg     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Reset Frequency     Day Count Convention     Currency     Holiday Calendar(s)     Holiday Calendar(s)     Business Day Convention     Modified     Following     Actual/360     USD     New York, London     New York, London     Modified     Following with     adjustment to period end     dates		
Contract Months	The next contract will be listed on the first business day of the month immediately following a quarterly month such that there will always be contracts listed with the next 21 forward starting		



	quarterly Effective Dates (beginning with Sep 2016) and with the 41 <sup>st</sup> forward starting quarterly Effective Date		
Effective Dates	Quarterly IMM Dates (3 <sup>rd</sup> 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 30 Years to the Effective Date.		
	For example, an Eris Interest Rate Swap Future with an Effective Date of 09/21/2016 and a tenor of 30 years implies a Cash Flow Alignment Date of 09/21/2046. 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 <sup>™</sup> 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.		



	<ul> <li>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.</li> <li>For example, if the CFAD is 09/21/2046, the Reset Dates will be on the 21<sup>st</sup> day of December, March, June and September, subject to the Modified Following convention.</li> </ul>		
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)	Eris Interest Rate Swap Futures are priced on a basis of 100, similar to market practice for bonds and other futures contracts.  The settlement value for each Contract is defined as:  St = 100 + At + Bt - Ct  St = settlement price at time t  At = net present value of the future cash flows at time t, based on OIS discounting  Bt = value of the historical fixed and floating amounts since contract inception  Ct = Eris Price Alignment Interest (or Eris PAI™).  Eris Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).  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		
Final Settlement Price	on the first listing date. $ S_{\textit{final}} = 100 + B_{\textit{final}} C_{\textit{final}} \\ S_{\textit{final}} = Settlement price at maturity \\ B_{\textit{final}} = Historical fixed and floating amounts since contract inception through maturity \\ C_{\textit{final}} = Eris PAI^{TM}, at maturity $		



Quoting Convention	Net Present Value (NPV) per Contract will be used for trade execution.			
	NPV is expressed in per contract terms for the Buyer (fixed payer).			
	Each Swap Future negotiated in NPV terms has an implicit futures-style trade price of			
	Trade Price = $100 + A_{negotiated} + B_t - C_t$ 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 <sup>TM</sup> at time t. The B and C components are calculated and applied by the Exchange, and are not subject to negotiation by the counterparties.			
	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.			
	The NPV per Contract can be negotiated in the following increments/tick sizes:			
	<ul> <li>\$1 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is less than 2 years.</li> <li>\$2 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 2 years and less than 4 years.</li> <li>\$5 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 4 years and less than 7 years.</li> <li>\$10 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 7 years and less than 20 years.</li> <li>\$20 for Contracts where the lesser of Remaining Tenor/Underlying Tenor is greater than or equal to 20</li> </ul>			
	years.			
Block Trades	Eris Interest Rate Swap Futures are eligible to be traded as privately negotiated, off-exchange Block Trades and reported to Eris Exchange.			
	Block Trades may be executed at any time, including times in which the public auction market is closed.			



Block Trades must be executed and reported pursuant to Rule 601 in the Eris Exchange Rulebook.

Current block trade thresholds are as follows and are subject to change:

 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.

	Minimum Block Size		
Remaining	Trading Hours: RTH Trading Hours: O		
Tenor			
Less than 5	\$10mm notional	\$1.0mm notional	
years	100 contracts	10 contracts	
5 years or more	rears or more \$10mm notional \$0.5mm not 5 contracts		

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.

# Exchange of Derivatives for Related Positions

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.

EDRPs must be executed pursuant to Rule 602 in the Eris Exchange Rulebook.

There are no minimum quantity thresholds required for EDRP's.

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.

# Ticker Symbol Convention

Maturity Code (Period Code) will be YYYYMMDD Product Code: ZD9230

For example, the 30 Year Ultra Forward Standard Contract with Product Code of ZD9230 and Maturity Date of 09/21/46 will have a ticker symbol of ZD923020460921.



Listed Spreads	Listed Spreads (or Discrete Spreads), composed of Standard
	Contracts, may be traded using the SwapBook Discrete Spread functionality.

Eris Exchange, LLC - Legal Notice 01/11/16

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

Futures trading is not suitable for all investors, and involves the risk of loss. Futures are a leveraged investment, and because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for a futures position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles. And only a portion of those funds should be devoted to any one trade because they cannot expect to profit on every trade. All references to options refer to options on futures.

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## Exhibit B

Market Notice #15-M16

TO: Eris Exchange Market Participants

FROM: Market Regulation Department

ADVISORY: #15-M16

DATE: November 20, 2015

SUBJECT: New Product Introduction: Expanded Set of Eris Standard Swap Futures

This Market Notice serves to notify Participants on Eris Exchange, LLC ("Eris Exchange" or "Exchange") of the introduction of the expanded set of Eris Standard Swap Futures, with a target launch date of January 11, 2016, subject to applicable regulatory review.

### **Background**

The expanded Eris Standards offering provides more yield curve granularity resulting in more accurate hedging, curve trading, and spreading against Treasury Futures.

Eris Exchange is offering additional tenors (3,4,12,15,and 20 years) in the on-the-run Eris Standards instruments with IMM Effective Dates, an expanded list of Eris Standards with IMM Effective Dates out 5 years and with an IMM Effective Date 10 years out, and new Eris Standards with dates matching treasury securities in the CBOT Treasury Futures' deliverable baskets.

### **Overview and Operational Considerations**

		Expansion of Eris Standards		
		On the Run Standards	Expanded Set of IMM Standards	Standard Invoice Swap Futures
Key Features	Description	Additional On the Run Eris Standards Tenors	New Eris Standards with additional forward starting IMM Effective Dates	New Eris Standards with characteristics of the Libor leg of an invoice spread
	Effective Date	Next Quarterly IMM Effective Date	Forward starting IMM Effective Dates out 5 years and an IMM Effective Date 10 Years out	Either the first or last delivery date of the related CBOT treasury futures contract
	Maturity Dates	2, <b>3,4</b> ,5,7,10, <b>12,15,20</b> ,30 years following Effective Date. New Tenors in <b>Bold</b>	2,3,4,5,7,10,12,15,20,30 years following Effective Date. New Tenors in <b>Bold</b>	Matched to Cash Treasury in future's delivery basket
_	Margining	2-Day VaR (SPAN)		
NOIT	Customer Account Setup	U	se Existing CME Futures customer accour	t
GRA	CME Position Account Setup	Single	segregated customer account within Eri	s TMF
CLEARIN G SYSTEMS INTEGRATION	Product Code Setup	ZA9102, <b>ZB9103</b> , <b>ZB9104</b> , ZB9105, ZC9107, ZC9110, <b>ZD9112</b> , <b>ZD9115</b> , <b>ZD9120</b> , ZD9130. New Z codes in <b>Bold</b>	ZA9202, <b>ZB9203, ZB9204,</b> ZB9205, ZC9207, ZC9210, <b>ZD9212, ZD9215, ZD9220,</b> ZD9230. New Z codes in <b>Bold</b>	ZA9903, ZA9906, ZA9909, ZA9912, ZB9903, ZB9906, ZB9909, ZB9912, ZC9903, ZC9906, ZC9909, ZC9912, ZD9903, ZD9906, ZD9909, ZD9912, ZD9803, ZD9806, ZD9809, ZD9812
LEAR	Margin Offsets	SPAN spread creditswith CM	vapFutures contracts via PCS	
5	PCS Reporting to CME Clearing	FCM Reports under Eris TMF		
	Trade Register	Firms use existing CME CMF tarde register to view positions		

### Impact to firms

Operationally, the expanded set of Eris Standards can be handled by market participants in a manner consistent with the existing Eris Standards (2Y, 5Y, 7Y, 10Y, and 30Y). With the release of the expanded Eris Standard instruments Eris Exchange Clearing Firms need to perform the following actions:

### 1. Initial Setup

**Product Setup** 

• Configure back-office systems to accommodate the new product codes. Sungard GMI users should consult the SunGard Client Service Bulletin when released.

### 2. Daily Processes

**PCS** Reporting

Using existing process for Eris Standards instruments, firms designate new Eris Standards positions for margin offsets via PCS reporting under the Clearing Firms' Eris Exchange TMF. Eris Standards are eligible for Margin offsets with CME Eurodollar, CME Treasury futures, and CME Deliverable Swap Future instruments via SPAN credits.

HVAR Portfolio Margining - OPTIONAL

Using existing process for designating Eris Standards for HVAR margining, firms designate new Eris Standards positions for HVAR margin offsets via customer account mapping at CME clearing operations. Eris Standards are eligible for HVAR Margin offsets with Eris Flexes, Eris Standards, CME Eurodollar, and CME Treasury futures.

### **Firm Testing**

The target date for expanded Eris Standards instruments to be available in Eris Exchange's DEMO and CME New Release environments is December 11, 2015. Please contact the Eris Control Center for testing credentials and to schedule testing.

For any questions or to coordinate testing, please contact the Eris Control Center, <a href="mailto:ErisControlCenter@erisfutures.com">ErisControlCenter@erisfutures.com</a>, 888-587-2699, Option 1.