

Mr Christopher Kirkpatrick  
Commodity Futures Trading Commission  
1155 21st Street NW  
Three Lafayette Centre  
Washington DC 20581

22 March 2017

Dear Mr Kirkpatrick

**Variable Notional Swaps (“VNS”) denominated in CHF, CZK, DKK, HKD, HUF, NZD, SGD and ZAR (“The Currency Set”)**

Pursuant to CFTC regulation §39.5(b), LCH Limited (“LCH”), a Derivatives Clearing Organization (“DCO”) registered with the Commodity Futures Trading Commission (the “CFTC”), is submitting Variable Notional Swaps (“VNS”) denominated in **CZK, DKK, HUF, NZD and ZAR** for determination of whether mandatory clearing should apply. In October 2016, the CFTC expanded the clearing requirement to include fixed-floating interest rate swaps denominated in Swiss francs, Hong Kong dollars, and Singapore dollars with compliance dates set for 2017 and 2018. Hence, this submission for determination only applies to the remaining currencies of The Currency Set.

Background

VNS are interest rate swaps (“IRS”) in which the notional of the trade can vary through the life of the trade. However, the notional for each leg of the swap for each coupon period must be defined and fixed at inception of the trade (generally VNS are designed to match a specific client’s financing requirements). Any VNS may, therefore, be replicated using a static portfolio of vanilla interest rate swaps. VNS are currently cleared by SwapClear in the following currencies and indices:

- Euro (EUR) EURIBOR
- UK Sterling (GBP) LIBOR
- US Dollar (USD) LIBOR
- Japanese Yen (JPY) LIBOR
- Canadian Dollar (CAD) BA-CDOR
- Australian Dollar (AUD) BBR-BBSW
- Norwegian Krone (NOK) NIBOR
- Polish Zloty (PLN) WIBOR
- Swedish Krona (SEK) STIBOR

In response to Clearing Members’ and clients’ feedback, LCH now intends to increase the eligibility of the VNS products denominated in The Currency Set. The currencies which this submission for determination applies to are noted as follows with their indices:

- Czech Republic Koruna (CZK) PRIBOR
- Danish Krone (DKK) CIBOR
- Hungarian Forint (HUF) BUBOR
- New Zealand Dollar (NZD) BBR
- South African Rand (ZAR) JIBAR

The tenor of the VNS will not exceed the maximum tenor of the IRS currently eligible for clearing in SwapClear. Further, SwapClear has not introduced changes to its risk management or operations in order to launch these products.

Factors for determination

***The existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data***

The volumes traded and cleared in the VNS product are relatively small in comparison with those of the vanilla IRS market. Using publicly available information on SwapClear volumes, the VNS products in the currencies currently eligible for clearing represent about 1% of the vanilla IRS market. It is expected that the volume ratios would be similar for VNS in the additional currencies.

The following table shows the YTD volume figures as at COB 14<sup>th</sup> March for each of the currencies where VNS are currently eligible, with figures representing USD millions of notional. The VNS numbers as a percentage of total rates products in each currency is very low. The total notional of rates products includes OIS and FRAs which significantly boost the total and so the percentage of VNS to straight "IBOR" IRS is also shown. It can be seen that the values are below 1% in all currencies except CAD which is slightly over.

	IRS	OIS	Basis	Zeroes	FRAs	VNS	Rates Total	VNS %Total	VNS %IRS
USD	21,091,950	53,245,856	3,061,681	12,228	38,428,601	66,808	115,907,124	0.058%	0.317%
GBP	3,101,816	2,360,084	329,785	20,710	4,351,953	12,686	10,177,034	0.125%	0.409%
EUR	18,221,636	13,345,977	157,605	4,722	16,175,040	40,630	47,945,609	0.085%	0.223%
JPY	3,500,179	147,491	200,955	0	28,674	82	3,877,381	0.002%	0.002%
AUD	2,122,581	2,038,910	99,738	768		954	4,262,951	0.022%	0.045%
CAD	1,649,569	701,928	58,483	1,931		18,193	2,430,104	0.749%	1.103%
NOK	220,646		568		654,439	547	876,200	0.062%	0.248%
PLN	280,522				145,130	58	425,710	0.014%	0.021%
SEK	725,776				1,681,679	981	2,408,436	0.041%	0.135%

The YTD volumes for the proposed VNS extension currencies were obtained for IRS and two estimates of the expected YTD volume (in USD million equivalent) for each new VNS currencies are computed.

	IRS	0.5% Estimate	1% Estimate
CHF	397,155	1,986	3,972
CZK	194,301	972	1,943
DKK	79,763	399	798
HKD	299,491	1,497	2,995
HUF	237,749	1,189	2,377
NZD	666,573	3,333	6,666
SGD	559,076	2,795	5,591
ZAR	299,083	1,495	2,991

There have been approximately 70 business days (averaging out holidays) so far this year. The above figures are converted to average daily volumes using a divisor of 70. This gives a reasonable estimate of the below average daily volumes that can be expected when the products are live and on the basis that all members are submitting VNS trades in the new currencies.

	0.5% Estimate	1% Estimate
CHF	28	55
CZK	13	27
DKK	6	11
HKD	21	42
HUF	17	33
NZD	46	93
SGD	39	78
ZAR	21	42

Further, data to value VNS in The Currency Set is readily available from conventional price sources, e.g. Bloomberg and Reuters. VNS trades consist of a fixed versus floating leg; VNS are priced as the sum of the discounted cash flows of both legs, using the same methodology as for IRS.

***The availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure to clear the contract on terms that are consistent with the material terms and trading conventions on which the contract is then traded***

LCH already has a well-developed rule framework and support infrastructure for clearing IRS. LCH intends to leverage this existing operational capability when extending its offering to VNS in The Currency Set.

In order to prepare for the launch of the above products, LCH will perform testing to ensure that it is able to clear these products in a manner which is consistent with the terms on which they are traded.

Further to this, LCH notified its Clearing Members of a number of minor rule changes which will be made in order to support the clearing of VNS in The Currency Set. The rule changes have been certified with the CFTC and made available on the LCH website.

***The effect on mitigation of systemic risk, taking into account the size of the market for such contract and the resources of the DCO available to clear the contract***

The US and EU have already implemented a clearing mandate for interest rate swaps products, where the definition contains VNS. In October 2016, the CFTC expanded the clearing requirement to include fixed-floating interest rate swaps denominated in Swiss francs, Hong Kong dollars, and Singapore dollars with compliance dates set for 2017 and 2018. LCH is aware that Canada has also proposed a clearing mandate for VNS products.

The products above do not introduce any novel risks to LCH, as the operational capability to manage the product, albeit in other currencies, is already in place. Further expanding the clearing offering will allow participants to manage a larger proportion of their risk via a CCP. LCH expects a significant number of current SwapClear Clearing Members to start clearing VNS in the additional currencies, once the service is live.

Further, in the event of a default, VNS products would be managed in conjunction with other products using portfolio level macro hedges to remove the primary risk of the defaulter ahead of an auction. The introduction of these products has no impact on the LCH's ability to manage defaults or the Clearing Members' ability to bid in an auction in a default scenario.

***The effect on competition, including appropriate fees and charges applied to clearing***

CME Clearing and Eurex Clearing already support VNS in the currencies which each CCP clears. LCH would expect to clear a proportion of the VNS products traded in the market that closely matches the proportion it clears in the vanilla IRS market.

LCH's fees and charges for the above products will be in line with those charged for existing SwapClear contracts.

***The existence of reasonable legal certainty in the event of the insolvency of the relevant DCO or one or more of its clearing members with regard to the treatment of customer and swap counterparty positions, funds and property***

The level of legal certainty around the clearing of VNS in CZK, DKK, HUF, NZD, and ZAR is in all material respects the same as that of the IRS already cleared by LCH.

Insofar as legal certainty in the event of the insolvency of the DCO is concerned, LCH would be wound up under English law.

Further Information (§39.5(b)(iii-viii))

VNS swaps are by definition less standardised than vanilla IRS, but their bespoke nature is only applicable to a small set of parameters of the trade, such as notional schedules, fixed rates and floating spreads. The trades are executed under standard ISDA Derivatives Definitions and are covered by the Financial products Markup Language (FpML) standard, which is a protocol used for sharing information on derivatives and other products.

The participant eligibility standards for VNS in CZK, DKK, HUF, NZD, and ZAR are the same as those for existing SwapClear Clearing Members.

There are no additional price sources required as the products can be valued using prices that are readily available from the price sources already used by LCH.

No material revisions or adjustments to the existing risk models/parameters and/or liquidity risk management framework are required for LCH to offer clearing of the new products.

LCH will make a number of minor changes to its Rulebook to enable clearing of VNS in CZK, DKK, HUF, NZD, and ZAR in the following sections:

- Product Specific Contract Terms and Eligibility Criteria Manual
- FCM Specific Contract Terms and Eligibility Criteria Manual

The rule changes have been submitted to the CFTC pursuant to §40.6(a), following notification to the LCH Clearing Members.

LCH engages its Clearing Members in the design and testing of new products at an early stage, through regular meetings and working groups. Clearing Members have been formally notified on the changes which LCH is required to make to its Rulebook.

Notice of this submission under CFTC regulation §39.5(b) was given to SwapClear Clearing Members on 3<sup>rd</sup> January 2017 and a copy of this notice is provided at **Appendix A**. Furthermore, this submission is publicly available at: <http://www.lch.com/rules-regulations/regulatory-responses>

LCH intends to launch these products with its Clearing Members and clients no earlier than 27<sup>th</sup> March, 2017.

Should you have questions please contact me at [Daniel.Maguire@lch.com](mailto:Daniel.Maguire@lch.com).

Yours sincerely

**Daniel J Maguire**



**Global Head of Rates & FX Derivatives**  
LCH Limited

cc. Parisa Abadi

**Appendix A**

**Notice of this submission provided to SwapClear Clearing Members**

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To	SwapClear Clearing Members
From	David Horner, Head of SwapClear Business Risk
Date	3 January 2017
Subject	<b>VNS in CZK/DKK/HUF/NZD/ZAR submission for determination of clearing requirements</b>

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Pursuant to CFTC regulation §39.5(b), LCH Limited (“LCH”), a derivatives clearing organization (“DCO”) registered with the Commodity Futures Trading Commission (the “CFTC”), is submitting Variable Notional Swaps (“VNS”) denominated in CZK, DKK, HUF, NZD, and ZAR for determination of whether mandatory clearing should apply. VNS are currently cleared by SwapClear in EUR, GBP, USD, AUD, CAD, JPY, NOK, PLN and SEK.

LCH now intends to increase the eligibility of the VNS products to include CZK, DKK, HUF, NZD, and ZAR, as well as CHF, HKD and SGD. The CFTC clearing mandate published in October 2016 already covers CHF, HKD and SGD currencies. Hence, this submission for determination only applies to the remaining currencies. As per CFTC regulation §39.5(b)(viii), LCH is required to notify members of its submission. This note does not constitute a notification that the products are live for clearing. A notice announcing the live data and arrangements for the formal product launch will be published separately.

#### Factors for determination

##### ***The existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data***

The volumes traded and cleared in the VNS product are relatively small in comparison with those of the vanilla IRS market. Using publicly available information on SwapClear volumes, the VNS products in the currencies currently eligible for clearing represent about 1% of the vanilla IRS market. It is expected that the volume ratios would be similar for VNS in the additional currencies.

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##### ***The availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure to clear the contract on terms that are consistent with the material terms and trading conventions on which the contract is then traded***

LCH already has a well-developed rule framework and support infrastructure for clearing IRS. LCH intends to leverage this existing operational capability when extending its offering to VNS in CZK, DKK, HUF, NZD, and ZAR.

In order to prepare for the launch of the above products, LCH will perform testing to ensure that is able to clear these products in a manner which is consistent with the terms on which they are traded.

Further to this, LCH notified its Clearing Members of a number of minor rule changes which will be made in order to support the clearing of VNS in the specified currencies. The rule changes will be certified with the CFTC and be made available on the LCH website.

***The effect on mitigation of systemic risk, taking into account the size of the market for such contract and the resources of the DCO available to clear the contract***

The US and EU have already implemented a clearing mandate for VNS products and in October, the Commodity Futures Trading Commission (“CFTC”) proposed a clearing mandate for swaps denominated in CHF, HKD and SGD. LCH is aware that Canada has also proposed a clearing mandate for VNS products.

The products above do not introduce any novel risks to LCH, as the operational capability to manage the product, albeit in other currencies, is already in place. Further expanding the clearing offering will allow participants to manage a larger proportion of their risk via a CCP. LCH expects a significant number of current SwapClear Clearing Members to start clearing VNS in the additional currencies, once the service is live.

Further, in the event of a default, VNS products would be managed in conjunction with other products using portfolio level macro hedges to remove the primary risk of the defaulter ahead of an auction. The introduction of these products has no impact on the LCH’s ability to manage defaults or the Clearing Members’ ability to bid in an auction in a default scenario.

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Further information will form part of the full §39.5 filing which will be publically available on the LCH website.

LCH looks forward to working with Clearing Members and the CFTC in the determination of clearing requirements. Please do not hesitate to contact me regarding any questions raised by this information.

Regards

David Horner  
**Head of SwapClear Business Risk**