Risk Notice 2025-022

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Subject	Default Fund parameters
Market	**DigitalAssetClear**
Classification	PUBLIC

LCH SA publishes hereinafter a Notice on the Digital Asset Derivatives Default Fund parameters for Transactions registered in the Digital Asset Derivatives Clearing System, in accordance with Instruction IV.3-1.

The Digital Asset Derivatives Default fund

Article 1
The date of calculation of the Digital Asset Derivatives Default Fund sizing and Clearing Members contributions ("Contribution Determination Date") mentioned in Articles 2, 6 and 11 of Instruction IV.3-1 is the latest Clearing Day of each month (position at end of day).
The contributions are called on the morning of the 4th Clearing Day of each month.

Article 2
There is no cap applied to this default in reference to the Article 8 of Instruction IV.3-1.

Article 3
The floor mentioned in Article 9 of Instruction IV.3-1 is set up to 10,000,000 Euros.

Article 4
The Minimum Contribution mentioned in Article 11 of Instruction IV.3-1 is set up to 2,500,000 Euros.

Customer Success Management team (DigitalAssetClear.csm@lseg.com) remains at your disposal for any additional questions.

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APPENDIX

This appendix aims at:

- Providing the method used for the calculation of the Stress Test Loss Over Initial Margin (STLOIM);
- Presenting how the size of the Digital Asset Derivatives Default Fund is set and how the individual contributions of the Clearing Members are determined.

1. The daily Stress Test Loss Over Initial Margin (STLOIM)

$\mathrm{STLOIM}_{\mathrm{D}}^{\mathrm{i}}$ means in respect of each Clearing Member active on Digital Asset Derivatives markets and any day, the stress-tested loss (calculated by LCH SA for a given scenario *i* determined by LCH SA) in excess of the Total Initial Margin, which could be incurred by LCH SA in respect of that Clearing Member's Digital Asset Derivatives business if that Clearing Member became a Defaulting Clearing Member on that day.

STLOIM is computed at Margin Account level using a set of both historical and theoretical scenarios, reviewed at least yearly. Potential stress test loss over collateral haircut (STLOHC) are also integrated (in respect of the collateral posted by the Clearing Member to cover its margin requirements, on the basis of an aggregation performed at Collateral Account level).

First, STLOIM are defined at Margin Account level (MA):

$$STLOIM_{MA}^{i} = -\left(STL_{MA}^{i} + TIM_{MA}\right)$$

Where:

- $STLOIM_{MA}^{i}$ is the STLOIM computed on the scenario i for each Margin Account;
- STL_{MA}^{i} is the Stress Test Loss computed for each Margin Account on the scenario i;
- TIM_{MA} is the Total Initial Margin for each Margin Account. (please refer to instruction IV.2-1);

Then, Margin Account are aggregated up to the Collateral Account level[1]:

$$STLOIM_{CA}^{i} = \sum_{p=1}^{n} \left(MAX\left(STLOIM_{MA}^{i}; 0\right)\right) + MAX(STLOHC_{CA}; 0)$$

Where

- $STLOIM_{CA}^{i}$ is the STLOIM computed on the scenario i for each Collateral Account
- p is the number of Margin Account linked to each Collateral Account
- $STLOIM_{MA}^{i}$ is the STLOIM computed on the scenario i for each Margin Account
- $STLOHC_{CA}$ is the stress testing loss over collateral haircut (STLOHC) associated to the Collateral Account, and $STLOHC_{CA} > 0$ akin to a loss (convention). No offset with market risk' scenarios

[1] Offsets are allowed on House accounts of the same Clearing Member code but not between Client accounts

– STLOIMs for a given day and a given scenario are aggregated at legal entity level where no netting are allowed between distinct Clearing Member codes of the same legal entity.

$$STLOIM_{LE}^{i} = \sum_{u=1}^{n} \left(STLOIM_{CM}^{i}\right) - ICS\_Margin_{LE}$$

Where:

– $STLOIM_{LE}^{i}$ is the STLOIM computed on the scenario i for each legal entity
– $STLOIM_{CM}^{i}$ is the STLOIM computed on the scenario i for each Clearing Member
– u is the number of Clearing Member codes linked to each legal entity
– ICS_Margin_{LE} is the Internal Credit Score Margin computed for this legal entity

2. Default Fund Size

2.1 Determine the daily measure for the default fund size

The Default Fund size is determined with the two worst STLOIM at financial group level from STLOIM computed at Legal entity

At this stage, there is a set of STLOIM for each scenarios i at financial group level (CM group).

For each scenario i, the first and the second worst STLOIMs are retained.

$$Daily\ Overall\ STLOIM_{D}^{i} = \max_{1}\left\{\mathrm{STLOIM}_{\text{all CM groups}}^{\mathrm{i,D}}\right\} + \max_{2}\left\{\mathrm{STLOIM}_{\text{all CM groups}}^{\mathrm{i,D}}\right\}$$

Where $Daily\ Overall\ STLOIM_{D}^{i}$ is the daily STLOIM computed for scenario i on D day with the two worst STLOIMs selected among all the CM financial groups.

$$\text{Daily Max STLOIM}^{\mathrm{D}} = \max_{\text{i=1 to n}}\left(Daily\ Overall\ STLOIM_{D}^{i}\right)$$

Where Daily Max STLOIM is the worst daily overall STLOIM among the n scenarios. Thus, every day, a Daily Max STLOIM is retained; the max scenario retained can be different from one day to another.

2.2 Determine the theoretical size of the Digital Asset Derivatives Default Fund

The Digital Asset Derivatives Default Fund Size (DF Size) is set, on a monthly basis, from the maximum over a 60 Clearing Day period of the Daily Max STLOIM + a 10% buffer.

$$\text{Default Fund theoretical size} = \max_{\text{D=1 to 60 days}}\left(\text{Daily Max STLOIM}^{\mathrm{D}}\right) \times 1.1$$

2.3 Apply Cap and Floor to the Default Fund Size

To determine the size of the default fund used to calculate the contributions, the cap and the floor, defined above in this notice are applied to the Default Fund theoretical size.

Member Contribution

The Digital Asset Derivatives Default Fund contributions are calculated at Legal Entity level, once a month. The individual Default Fund Contributions "shall be proportional to the exposures" (EMIR; art 42-2) of the member. Therefore, the individual contribution is computed as the pro-rata of the average TIM over the last 60 Clearing Days.

$$Average\ TIM_{LE} = \frac{1}{n}\sum_{t=1}^{n}\left(TIM_{t,MA\in LE}\right)\ where\ n = 60$$

Where:

- $Average\ TIM_{LE}$ is the average TIM over the last 60 days at legal entity level
- $TIM_{t,MA\in LE}$ is the consolidated TIM at legal entity level at calculation date t

If a new member is recently launched, the average must be set accordingly to the launch date. Thus, in this specific case, n can be lower than 60.

Then the pro-rata of the average TIM is calculated and the Digital Asset Derivatives Default Fund Contribution Floor is applied if the individual DF contribution provided by the pro rata methodology is lower than this floor.

$$Individual\ DF\ Contribution_{GC} = max\left(\frac{Average\ TIM_{LE}}{\sum_{z=1}^{n}(Average\ TIM_{LE}^{z})} \times DF\ theoretical\ size; Contrib.Floor\right)$$

Where:

- $Individual\ DF\ Contribution_{GC}$ is the individual contribution
- $\sum_{z=1}^{n}(Average\ TIM_{LE}^{z})$ is the sum of the average TIM over the last 60 days
- z is the number legal entity
- $DF\ theoretical\ size$ is the theoretical DF based on the cover 2 principle + a 10% buffer
- $Contrib.Floor$ is the minimal default fund contribution.

Due to this floor, the final size of the Default Fund can be higher than the theoretical size. Therefore, the sum of contributions can be higher than the theoretical DF and potentially higher than the cap.

$$Production\ DF = \sum_{z=1}^{n} Individual\ DF\ Contribution_{LE}^{z}$$

3. Date of calculation and contribution call

Monthly reviews of the Default Fund

The date of calculation, i.e. the latest day of the 60 Clearing Day period used for monthly review of the contribution is the latest Clearing Day of each month (position at end of day).

Date of pre-advice

The pre-advice report is provided the 2nd and 3rd Clearing Day of each month in the treasury report.

Date of contribution calls

The contributions are called on the morning of the 4th Clearing Day of each month.