SmartCap Trading Model

Nord Pool Risk Management

October 2025

Introduction

In March 2025, Nord Pool launched the SmartCap Trading Model, a new collateral and trading framework designed to enhance collateral management efficiency and flexibility for members. This model also aims to offer increased protection and strengthen risk management for members.

SmartCap Trading Model

The SmartCap Trading Model is a self-determined collateral and trading model giving members full control over the amount of collateral they post to Nord Pool. This collateral is used to set a Trading Limit, aimed at managing trading exposures for the member. Minimum collateral requirements, as stipulated on Nord Pool's website, continue to apply to members. Clearing Members subject to the SmartCap Trading Model are not subject to the Collateral Calculation Methodology as described under the Classic Trading Model.

Trading Limit Utilisation

SmartCap operates on the basis of an Initial Trading Limit set by the amount of collateral posted by a member. A member's utilisation of the Trading Limit comprises 3 separate components:

1) **Open Orders**
2) **Executed Trades Awaiting Invoicing**
3) **Unpaid Invoices**

- ## Open Orders

As **Open Orders** remain potential exposures until executed, their Trading Limit utilisation is calculated as follows:

Day Ahead and Intraday Auctions:

In order to have realistic exposure calculations, Risk Prices (Positive Risk Prices and Negative Risk Prices) are used as a realistic, albeit generally conservative, market price when calculating exposures of certain Open Orders in Day Ahead and Intraday Auction trading. Current Risk Prices can be found here.

- **Curve Orders Types:**
  - As Curve Orders can have a high maximum price, SmartCap will use the Positive Risk Price applicable to the order area to "cut" the curve bid so that the last price point of any buy Curve Order will be at the Positive Risk Price instead of the maximum price.
  - Curve Orders can also have a low minimum price. In this case SmartCap will use the relevant Negative Risk Price applicable to the order area to "cut" the curve bid so that the last price point of any sell Curve Order will be at the Negative Risk Price instead of the minimum price.
    - Curve cutting is done in such a way that if there is no exact price point defined in the originally submitted curve exactly at Risk Price, SmartCap will interpolate the original bid and determine the interpolated volume at the Risk Price.
  - For Curve Orders, SmartCap will aggregate curves before calculating their exposure if certain conditions apply:
    - Curve Orders have to belong to the same netting group, they have to be placed for the same area (excluding German areas where TTG, TBW, 50Hz and AMP can be netted together as they will have same price) and have to be for the same auction instance.
  - Aggregation of curves means that the total net volume of all curves is calculated for each distinct price point, within all price points of curves subject to aggregation.

    If curves have different currencies but still can be subject to aggregation, conversion of price points to EUR is done before aggregation of the curves.
- **Block Order Types:**
  - Block Order exposure is calculated for each netting group, per auction, by using either
    - Risk Prices, if the block price is higher than the relevant Positive Risk Price in the case of buy orders (or lower than the relevant Negative Risk Price in the case of sell orders), or
    - The member defined block price, if the block price is lower than the relevant positive Risk Price in the case of buy orders (or higher than the relevant Negative Risk Price in the case of sell orders).
  - The exposure of individual blocks are calculated as Total volume of the block * price.
  - If the block exposure is negative (net sell at positive price), it will be treated as zero exposure
  - All block orders are treated with 100% MAR from the exposure perspective.
  - If the block price is not in EUR, it will be converted to EUR using the last available rate, as is done for curve orders.
  - All block exposures are summed together and then later summed together with any curve orders subject to the same netting group and auction.
  - In case of Exclusive Group Orders, each block order within the Exclusive Group will have their exposure calculated and the total exposure of the Exposure Group will be the maximum

exposure of a block order within the group. This is because in case of Executive Group orders, only one of the blocks within the group will realize as a trade if any.

- For Spread Blocks, special handling is done as in that case there are two Block orders that both need to be realized or neither of them is realized. A Spread Block has both buy and sell Blocks and they will be netted together to get the total exposure of a Spread Block.

Note: Where realised market prices, following an auction, fall beyond Risk Prices (ie. higher than Positive Risk Price or lower than Negative Risk Price), a members Trading

isation may increase once the auction results are published (when Open Orders move to Executed Trades). This may also cause Trading Limit utilisation to exceed a members Trading Limit. In such cases, a member will be prevented from accumulating any further exposures, as explained below, and Nord Pool may request the member to provide additional collateral.

Intraday Continuous Trading:

- Where a buy order has an upper price limit, the upper price limit will be used to calculate exposure.
- Where a sell order has a lower price limit below 0, the lower price limit will be used to calculate exposure otherwise exposure will be 0.

Regardless of order type or direction (buy/sell), Open Orders cannot reduce Trading Limit utilisation. Any sell orders will only contribute to reducing Trading Limit utilisation after the trade has been executed (assuming positive prices).

- ## Executed Trades Awaiting Invoicing

Because **Executed Trades Awaiting Invoicing** realised exposures, their monetary value contribute directly to the utilisation of the Trading Limit.

- ## Unpaid Invoices

Generally Credit invoices (payments owed to members) will not contribute to Trading Limit utilisation. However, where a member has separate Debit and Credit invoices **generated in the same invoicing cycle**, SmartCap will net these invoices to determine Trading Limit utilisation. It is important to note that the Trading Limit utilisation from netting invoices will never fall below zero.

A Debit Invoice will no longer contribute towards limit utilisation only when Nord Pool has received confirmation from our bank that the invoice payment has been received.

Trading Limit Utilisation Visibility, Alerts and Blocking

Each member has the ability to view their Trading Limit and utilisation in Nord Pool's CASS UI, via the trading platform and the associated API feeds. In addition to this, a member will receive an update on Trading Limit utilisation after each order submission..

For members under the SmartCap Trading Model, where a Trading Limit is reached, **the member will not be permitted to submit any additional orders which would increase exposure further**. A member will also receive an alert to notify them of same. At this point a member is required to reduce exposure, await invoice payments, or increase their Trading Limit before they can submit any additional orders which would utilise Trading Limits

Estimating and Forecasting Trading Limits required and Limit Utilisation

There are some factors which a member should consider when estimating what Trading Limit they require to trade as needed on Nord Pool without interruption. These include:

1) If submitting Block or Curve Orders, what are the current Risk Prices;
2) How long orders may remain Open until matched and become Executed Trades;
3) How long until an Executed Trade gets Invoiced, i.e. Nord Pool's settlement and invoicing cycle (see here);
    a. Nord Pool's invoicing cycle runs at approx. 14:30 CET each Norwegian banking day. As the treatment of sell trades change as trades move from Executed to Invoiced, the invoicing/settlement run may increase Trading Limit utilisation.
    b. **Specific attention should be given to the differing settlement cycles for Day-Ahead, Intraday Auction and Intraday Continuous trading.**
        i. **Day Ahead (DA)** trades get invoiced on Delivery Day – 1 (i.e. Day of Auction). DA debits (payments due to Nord Pool) are due on Delivery Day, credits (payments due to Members) are paid on Delivery Day + 1.
        ii. **Intraday Auction (IDA)** trades get invoiced on Delivery Day. IDA debits are due on Delivery Day + 1, credits are paid on Delivery Day + 2.
        iii. **Intraday Continuous (IDC)** trades get invoiced on Delivery Day + 1. IDC debits are due on Delivery Day +2 and credits are paid on Delivery Day +3.
4) Payment dates of Credit and Debit Invoices; Debit Invoices are due 1 business day after invoicing cycle. Credit invoices are paid 2 business days after invoicing cycle.
5) Weekend and Norwegian non-banking days (when invoicing cycles and payments do not take place, notably including the Easter and Christmas periods). On these occasions, Trading Limit utilisation can increase significantly depending on trading patterns.

Questions?

Questions on the SmartCap Trading Model can be addressed to NPRiskManagement@nordpoolgroup.com