## Document History

<table>
<thead>
<tr>
<th>Revision</th>
<th>Published</th>
<th>Author[s]</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>21 March 2019</td>
<td>Elin Childs</td>
<td>First draft of new charter</td>
</tr>
<tr>
<td>1.1</td>
<td>19 September 2019</td>
<td>Elin Childs</td>
<td>Clarified MRC’s roles and responsibilities to align with the new risk policy framework</td>
</tr>
<tr>
<td>1.2</td>
<td>30 March 2019</td>
<td>Irina Slinko</td>
<td>Updated the list of participants</td>
</tr>
<tr>
<td>1.3</td>
<td>28 September 2020</td>
<td>Irina Slinko</td>
<td>Updated MRC member selection process</td>
</tr>
<tr>
<td>1.4</td>
<td>16 September 2021</td>
<td>Irina Slinko</td>
<td>Annual charter update</td>
</tr>
<tr>
<td>1.5</td>
<td>13 September 2022</td>
<td>Irina Slinko</td>
<td>Annual Charter Update</td>
</tr>
<tr>
<td>1.6</td>
<td>5 September 2023</td>
<td>Irina Slinko</td>
<td>Annual charter update. Included the Wind Down Plan on the non-objection list</td>
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Purpose
The Nasdaq Clearing Member Risk Committee (“MRC” or the “Committee”) is appointed by Nasdaq Clearing AB’s (“Nasdaq Clearing” or “the Company”) Board of Directors (“the Board”). The Committee is established in accordance with article 28 of the European Market Infrastructure Regulation (EU) No 648/2012 (“EMIR”) and is an advisory committee to the Board.

The Committee advises the Board in their risk oversight role, ensuring that the Company’s risk management framework is appropriate and functioning as intended and the level of risk assumed is consistent with Nasdaq Clearing’s strategy and risk appetite.

The governance arrangements outlined in this MRC charter (“Charter”) shall be publicly available.

Objective and Mandate
While the Company’s management retains ownership and is accountable for the day-to-day risk management, the MRC shall advise the Board on any arrangements that may impact Nasdaq Clearing’s risk management and include at least the following matters:

- Review Nasdaq Clearing’s risk management appetite and risk strategies.
- Review all updates to sub-policies of Board level policies related to the below matters, unless Nasdaq Clearing deems the changes to be of such immateriality that they do not require the MRC’s review. Examples of these policies include policies related to margin, credit risk management and framework for calculating liquid financial resources. If the MRC were not to agree with the proposed material changes to a sub-policy, the MRC can request these changes to be presented to the Board for approval.
- Review and monitor internal and external review findings (such as internal audit findings, model validation results) and remedial actions.
- Review risk reports.
- Review material stress testing and reverse stress testing results.
- Review margin model parameters including margin off-set on at least an annual basis.
- Review and discuss the outcome of hypothetical narrative scenarios and thematic stress testing results.
- Periodically review and provide advice on the back testing, sensitivity testing, stress testing and reverse stress testing results and analysis.
- Review model performance results at least quarterly.
- Review valuation models used in a potential scenario where pricing data is not readily available or reliable.
- Review the results of the annual default management fire drill exercises including any potential actions arising as a result of the fire drill.
• Review and discuss the robustness of the default fund framework and its ability to reflect market movements annually including any material revisions of the framework, default fund structure and other financial resources.
• Review elevated and high residual risks identified as part of the Risk Assessment of significant changes if they relate to new initiatives according to the New Product Approval Policy (NPAP).
• Review, discuss and challenge identified risks, potential control deficiencies and their potential impact on the strategy of the Company.
• Give advice on other matters as required by the Board.

The MRC shall provide non-objection to at least the following matters:

• Significant changes in the default management procedures.
• Significant changes, according to the New Product Approval Policy (“NPAP”), that require the Board’s approval.
• Board level risk management policies and the Board’s risk appetite.
• Stress test methodology and significant changes to the way in which stress test scenarios are generated, including the framework used by Nasdaq Clearing to identify extreme but plausible market conditions, at least on an annual basis.
• Proposed follow-up actions from the hypothetical narrative scenarios and thematic stress testing on an annual basis.
• New margin models and new margin add-ons.
• Significant margin model changes, significant margin add-on changes, significant model parameter changes (where the change is deemed significant impact is deemed material in accordance with the ESMA’s opinion under EMIR Article 49).
• The proposed remedial actions to address the validation findings including the proposed actions associated with a potential model validation rejection.
• Any changes to the categories of admissible clearing members and the admission criteria.
• Outsourcing of functions (critical processes, services or activities).
• The liquidity risk framework, any material changes to the liquidity risk framework and the liquidity plan.
• Any changes to the definition of highly liquid financial instruments.
• Any changes to the clearing capital waterfall.
• The Recovery plan and introduction of new recovery tools.
• The Wind down plan.

MRC Membership
The MRC shall be composed of two independent Nasdaq Clearing Board members, six clearing members and four clients. The clearing members, clients and independent Nasdaq Clearing Board members are each a “Committee Member”.

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The Board shall appoint the two independent Nasdaq Clearing Board members and elect one of them as the Chairperson. In the Chairperson’s absence, the other independent Board member shall act as the Chairperson.

Nasdaq Clearing Chief Compliance Officer shall act as the MRC Secretary.

The Chairperson may, on a regular or ad-hoc basis invite employees of Nasdaq Clearing, persons employed by Nasdaq Inc., or its subsidiaries, external independent experts / academics to attend meetings in a non-voting capacity (i.e., they cannot provide non-objection). Additionally, competent authorities may request to attend the MRC meetings in a non-voting capacity and to be duly informed of the activities and decisions of the risk committee.

In consultation with the Committee Member Representatives (see definition of Committee Member Representative below), the Chairperson may delegate Committee advisory responsibilities to sub-committees or discussion forums. The Committee Member Representatives can – subject to appropriate confidentiality agreement - invite experts from their institutions to the sub-committees and discussion forums.

**Committee Member Selection Criteria**

**Selection criteria related to the six clearing members:**

- The two clearing members in the financial market and the two clearing members in the commodities markets with the highest default fund contribution (12-month average) during the most recent 12 months, will be offered to appoint a Committee Member Representative. This is subject to the contribution being deemed to be representative of the clearing members’ current exposures and reasonably indicative of the clearing members’ future 12 months exposures.
- The selection criteria of the additional two clearing members are: Take the largest commodity clearing member not already identified as one of the first four members and the largest financial clearing member not already identified as one of the first four members in terms of default contribution (12-month average during the most recent 12 months). For the identification of these two additional clearing members, the balance between Nordic / non-Nordic representation should also be considered, meaning that such representation should be used as a selection criterion to adjust representation to two or three clearing members representing each geographical group.
- In case a clearing member rejects to be a Committee Member, the clearing member with the sixth or seventh largest default fund contribution across the three markets will be offered to be a Committee Member, etc. The balance between Nordic / non-Nordic representation should also be considered.
- The selection criteria shall, as a general rule, be applied to the extent possible. Any deviation should be justified, documented and approved by the Chairperson.
Selection criteria related to the four clients are:

- The two clients with the highest (indirect) default fund contribution (12-month average) in the financial market and the two clients with the highest default fund contribution (12-month average) in the commodities market will be offered to be a Committee Member. This is subject to the contribution being deemed to be representative of the clients’ current exposures and reasonably indicative of the clients’ future 12 months exposures. The balance between Nordic / non-Nordic representation should also be considered.

- In case a client rejects the possibility to be Committee Member, the client with the fifth largest default fund contribution across the three markets will be offered to be a Committee Member, etc. taking into consideration the balance between representation across the financial and the commodities markets. The balance between Nordic / non-Nordic representation should also be considered.

- The selection criteria shall, as a general rule, be applied to the extent possible. Any deviation should be justified, documented and approved by the Chairperson.

Required Competencies and Expertise of the Committee Member Representatives

The appointed Committee Members shall each nominate a “Committee Member Representative” which shall together form a committee with the aim of collectively having expertise and competencies within:

- General Risk Management and Governance (including risk appetite, tolerances and new product approval);
- Credit Risk (including modelling of ratings, capital allocation, stress testing and default fund rules);
- Market Risk (including modelling of future exposures /collateral, valuation of contracts and stress testing);
- Liquidity Risk (including modelling of liquidity risk, collateral handling and liquidity planning)
- Capital Risk (including capital management and capital adequacy);
- Operational Risk (including risk identification, incident management, outsourcing and cyber risk);
- Model Risk (including model development and validation);
- Trade operations (including pre-trade vs. post-trade and auctions);
- The equities, commodities, seafood and fixed income markets; and
- Clearing house operations and regulatory expertise.

The Committee Members and Committee Member Representatives are appointed by the Board on a 24-month cycle at the first ordinary Nasdaq Clearing Board meeting following the expiration of the 24-month cycle.

The appointed Committee Member Representatives shall at the time of their nomination provide a curriculum vitae and any required information to verify their competencies.

The Board may reject a nomination of a Committee Member Representative if such nominated representative does not satisfy the criteria set forth above, if the nomination does not contribute to the overall composition of the Committee or it there are other material reasons which from the Board’s point
of view would hinder an appointment as a Committee Member Representative.

At the start of each 24-month cycle, the Chairperson is responsible for reviewing the Committee’s joint competencies within the areas above. The outcome of the review shall be presented to the MRC at the first meeting of the 24-month cycle.

Following such review, the Board may request the Committee Member to nominate another representative to ensure that the joint expertise and competencies within MRC are sufficient at all times.

In exceptional cases and subject to Board approval, the Committee Members have the right to nominate a deputy Committee Member Representative. The deputy will also need to satisfy the criteria set forth above.

Deputy Committee Member Representatives, if any, may only attend meetings and give their non-objection where the ordinary Committee Member Representative is unavailable and has given prior notice of their absence.

**Reporting**

**Reports from the Committee**
The Chairperson provides reports, including any opposing opinions in relation to decisions taken, to the Board. The MRC meeting minutes shall be provided to the Board and where appropriate be supplemented by a report from the Chairperson.

**Reports to the Committee**
All MRC members, potential sub-committees and other key functions at Nasdaq Clearing, may escalate issues to MRC. Nasdaq Clearing Chief Executive Officer, Chief Risk Officer or Chief Technology Officer provide reports, as appropriate and/or as requested, to the MRC.

**Organizational Guidelines**

**Committee Meetings**

**Frequency and Schedule**
The MRC shall meet once per quarter, or more frequently, as called by the Chairperson. As and when needed, the Chairperson may call additional Committee meetings. Any member of the MRC, as well as the Nasdaq Clearing Chief Risk Officer, may request the Chairperson to convene a meeting at any time.

Meetings are held at Nasdaq Clearing’s premises in Stockholm, unless other arrangements are deemed necessary by the Chairperson. Committee members are also allowed to participate telephonically or by other media which allows members to hear and participate in the Committee proceedings.
Reasonable efforts shall be made to consult the MRC on developments impacting Nasdaq Clearing’s risk management in emergency situations.

**Quorum and Decision-making**
An MRC quorum comprises of at least six Committee Members and must include the Chairperson and three clearing member representatives and two client representatives.

Resolutions shall be adopted by a simple majority of the votes cast, i.e., the majority of the non-objections given. In the event of a tied vote, the Chairperson shall have the casting vote.

Non-objection shall have the meaning of not opposing to the decisions required by the Board.

The advice and decisions taken by the Committee shall not be under any direct influence of Nasdaq Clearing management.

**Agenda**
The Nasdaq Clearing Chief Risk Officer shall propose the agenda, including establishing a plan to outline topics that will be considered / discussed over the course of the year. The proposed agenda and plan shall be agreed by the Chairperson. Any Committee Member Representative can propose agenda topics.

**Dedicated sub-committees for specific topics**
At the discretion of the Chairperson and Nasdaq Clearing Chief Risk Officer jointly, the MRC may appoint a dedicated sub-committee for specific topics where the Committee Member Representatives with detailed content knowledge and expertise in that specific topic are asked to participate. The dedicated sub-committee should be used to lead informed discussions aiming to provide recommendations regarding the specific topic to the MRC. The sub-committees shall not have decision-making powers.

**Committee Records**
Agenda, supporting documentation and previous meeting minutes will be circulated to the MRC members in advance of a meeting, at least five business days prior to the meeting. In special circumstances, the agenda or the supplementary documentation may be handed out at a later stage. The Secretary will prepare, circulate, and keep minutes of each MRC meeting. The MRC Chairperson shall attest the meeting minutes.

The minutes shall contain all decisions made by the MRC. Discussions concerning important matters, the non-objections given, any opposing opinions and if a member refrains from participating in a decision due to a conflict of interest shall be recorded in the minutes.

**Confidentiality of Committee Information**
Committee information may only be distributed as prescribed in this Charter or by the Chairperson, as part of the implementation of actions authorized by the Committee or as necessary to comply with internal reporting requirements.
To maintain confidentiality, persons not employed by the Committee Members or Nasdaq Clearing are not permitted to participate in Committee meetings, other than to give a presentation as requested by the Chairperson.

The Committee Member Representatives, their delegates as well as experts from the Committee Member’s organizations invited to sub-committees or discussion forums shall be subject to a confidentiality agreement requiring the relevant person not to, subject to regulatory requirements, disclose the matters discussed in the MRC or the decisions taken in the Committee.

**Remuneration**

Each Committee Member Representative shall be responsible for the costs associated with their participation in the MRC and shall not be entitled to demand or receive any fee or compensation from Nasdaq Clearing for such participation. However, on a case-by-case basis, an independent expert might be compensated by Nasdaq Clearing upon agreement.

**Termination and Disqualification**

If one of the clearing members or clients was to change their role from member to client (or vice versa) or stop being a member or client, the basis under which they have been appointed a Committee Member would have changed and it is up to the Chairperson and the Chief Risk Officer to jointly decide if the clearing member or client can continue as a Committee Member during the appointed period on a non-voting capacity or if their appointment as Committee Member should be terminated. To ensure a Committee quorum, a new clearing member or client shall be appointed in a timely manner in line with the selection criteria outlined above. Nasdaq Clearing Chief Risk Officer is responsible for ensuring that all new Committee Member representatives receive a suitable introduction.

The Committee Member or its Committee Member Representatives shall inform the Committee of any circumstances that might cause disqualification of the Committee Member to form part of the Member Risk Committee.

A Committee Member Representative shall also inform the Committee if they terminate their employment as the respective clearing member or client. In such a scenario, a new Committee Member Representative from that clearing member or client shall be appointed, according to the criteria set out above.

**Conflict of Interest**

Each Committee Member Representative shall disclose and address any potential conflict of interest in any matters discussed in the MRC. Where the Chairperson determines that a Committee Member or Committee Member Representative has an actual or potential conflict of interest, this shall be noted in the minutes and the Committee Member shall not be allowed to give their non-objection in that particular matter.
Amendment of the MRC Charter

This Charter shall be reviewed on an annual basis. Committee Member Representatives may propose amendments to this Charter and any amendments are subject to a non-objection from the MRC and shall be approved by the Board.

Information to the Swedish Financial Supervisory Authority

The Chief Compliance Officer is responsible for promptly, in writing, informing the Swedish Financial Supervisory Authority (Sw: Finansinspektionen) of any decision of the Board where it does not follow the advice of the MRC.
# Appendix 1 – Committee Members

## Committee Members

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Delegate</th>
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<tbody>
<tr>
<td>Chairperson</td>
<td>Lars Nyberg</td>
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<tr>
<td>Independent Board Member</td>
<td>Sonja Daltung</td>
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<tr>
<td>Member Representative</td>
<td>Erkka Nässäkkälä, SEB</td>
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<td>Member Representative</td>
<td>Suvi Paaso, Fortum</td>
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<td>Member Representative</td>
<td>Gustaf Jarder, Swedbank</td>
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<td>Member Representative</td>
<td>Trishen Patel, JP Morgan</td>
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<td>Member Representative</td>
<td>Ed van der Star, ABN Amro</td>
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<tr>
<td>Member Representative</td>
<td>Matthew Little, Vattenfall</td>
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<tr>
<td>Client Representative</td>
<td>John Esk, Alecta</td>
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<tr>
<td>Client Representative</td>
<td>Shane Boles, Susquehanna International</td>
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<tr>
<td>Securities Ltd</td>
<td></td>
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<tr>
<td>Client Representative</td>
<td>Joakim Remelin, EON</td>
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