Q CONSTITUTION

PREAMBLE

(A)   Q is an open-source system that is independent of any country, company or organization.

(B)   Q has been developed and shall be further developed for the benefit of humanity.

(C)   We, the Q Token Holders, Validator Nodes, Validator Node Candidates, Root Nodes, Q Nodes and Q ID Holders (together, the "**Q Stakeholders**") who freely participate in, use, interact with or contribute to Q hereby adopt the following constitution (this "**Q Constitution**").

Q CONSTITUTION

Article 1.   SUPREMACY OF THE Q CONSTITUTION

1.1   This Q Constitution sets out the basic rules of Q, including the rules for participating in, using, interacting with or contributing to Q.

1.2   This Q Constitution shall only be amended at the proposal of one or more Q Token Holders if such proposal is put to a vote and accepted in accordance with Appendix 5 (*Voting*). Otherwise, any purported amendment to this Q Constitution shall be null and void.

1.3   By operating a full node that supports the Q peer-to-peer network, each Validator Node, each Root Node and each node on Q which is neither a Validator Node, nor a Root Node (such node, a "**Q Node**") agrees to and accepts this Q Constitution, as amended from time to time in accordance with the terms of this Q Constitution. By holding at least one Q Token, each Q Token Holder agrees to and accepts this Q Constitution, as amended from time to time in accordance with the terms of this Q Constitution. By holding a Q Personal ID, each Q ID Holder agrees to and accepts this Q Constitution, as amended from time to time in accordance with the terms of this Q Constitution.

1.4   Capitalised terms used, but not otherwise defined in this Q Constitution (including in the Preamble and Appendices to this Q Constitution) shall have the meanings given in Appendix 1 (*Definitions*) or, as the case may be, in Part B (*Technical Definitions*) of Appendix 6 (*Technical Parameters*).

Article 2.   THE Q BLOCKCHAIN AND TRANSACTIONS ON Q

2.1   Q shall operate on a public, distributed blockchain (the "**Q Blockchain**").

2.2   The Q Blockchain shall be maintained by a permissionless peer-to-peer network of nodes.

2.3   The state of Q at any time shall be validated on a delegated proof of stake (DPoS) basis by the Validator Nodes.

2.4   The Q Blockchain shall be the definitive record of the state of Q at any time and of all transactions carried out on Q up to such time. The Q Blockchain shall not be modified retrospectively. After a transaction has been recorded on the Q Blockchain, it shall only be reversed or modified by way of a subsequent transaction.

Article 3. Q TOKENS AND Q TOKEN HOLDERS

3.1 The native assets of Q shall be tokens in bearer form which are fully fungible with each other (each, a "**Q Token**"). Each Q Token shall be subdivided into and shall be freely transferable in fractions of $1/10^{18}$ or any integral multiple thereof. Unless the context requires otherwise, all references to Q Tokens in this Q Constitution shall be construed to include freely transferable fractions of Q Tokens.

3.2 Each holder of a Q Token (the "**Q Token Holder**") may delegate some or all of its rights (including, without limitation, voting rights) in respect of any Q Token held by it to any other Q Token Holder.

3.3 Each Q Token Holder may propose changes to and amendments of Q, including, without limitation, this Q Constitution and vote on any such proposal in accordance with Appendix 5 (*Voting*).

3.4 Initially, 10,000,000,000 Q Tokens shall be generated. Thereafter, a number of additional Q Tokens equal to the Block Subsidy shall be generated with every new block on the Q Blockchain and allocated between the Q Stakeholders (other than the Q Nodes) in accordance with Part A (*Constitutional Parameters*) of Appendix 6 (*Technical Parameters*).

Article 4. VALIDATOR NODES

4.1 A Q Token Holder may Stake to a node on Q some or all of the Q Tokens owned by such Q Token Holder. At any time, a number of nodes on Q (i) up to the Maximum Number of Validator Nodes to which the most Q Tokens have been Staked, (ii) which satisfy the Self-Stake Requirement and (iii) whose public keys are included on the Validator Node List at such time, shall act as validator nodes (each such node, together with the operator of such node, a "**Validator Node**").

4.2 At any time, a number of nodes on Q equal to the Number of Validator Node Candidates which are not Validator Nodes, but to which the most Q Tokens have been Staked, which satisfy the Self-Stake Requirement and whose public keys are not included on the Validator Node Exclusion List, shall be candidates to become Validator Nodes (each such node, together with the operator of such node, a "**Validator Node Candidate**").

4.3 Each Validator Node shall be responsible for maintaining the state of Q in compliance with this Q Constitution, with the care of a diligent Validator Node and in good faith. In particular, but without limitation, each Validator Node is obliged to:

4.3.1 operate a full node that supports the Q peer-to-peer network by running a Q client software that reflects the rules of Q as laid down in this Q Constitution;

4.3.2 where applicable, verify each Voting Proposal in accordance with Appendix 5 (*Voting*) for technical correctness.

4.3.3 as a strict obligation which the Q Token Holders consider essential to enforce the rules of this Q Constitution and to protect the value of the Q Blockchain, formulate block candidates which contain one or more Valid Transactions and sign those block candidates or co-sign block candidates formulated by other

Validator Nodes which contain one or more Valid Transactions. Such Valid Transactions shall include, without limitation:

(a)   if a Slashing Proposal has been accepted in accordance with Appendix 5 (*Voting*), a corresponding Slashing Transaction; and

(b)   if an Enforceable Arbitral Award has been rendered, a corresponding transaction recording the terms of such Enforceable Arbitral Award and, if applicable, one or more further transactions implementing the terms of such Enforceable Arbitral Award.

4.4   For validating transactions on Q and recording them on the Q Blockchain, the Validator Nodes shall be entitled to charge certain fees in accordance with Appendix 3 (*Transaction Fees*).

4.5   Each Validator Node agrees and irrevocably accepts that, in case of a breach of its obligations under this Q Constitution, it will be sanctioned by the Slashing of Q Tokens Staked to it in accordance with Article 6 (*Slashing*). The severity of the sanctions depends on the gravity of the breach, as more fully described in Appendix 7 (*Guidelines for Slashing*). They are to be applied with rigour as a central means pursuant to this Q Constitution to incentivize good conduct by Validator Nodes generally, to compensate and incentivize those Q Token Holders who exercise supervisory and policing functions, to compensate all Q Token Holders for the general risk assumed and general losses incurred by their entirety due to the conduct of non-compliant Validator Nodes, and to limit the risk of future harm occurring.

4.6   Further and in addition, each Validator Node agrees to and irrevocably accepts that its public key shall be removed from the Validator Node List in the circumstances described in Article 9.1 (*Validator Node List, Validator Node Exclusion List and Root Node List*) and shall be included on the Validator Node Exclusion List in the circumstances described in Article 9.2 (*Validator Node List, Validator Node Exclusion List and Root Node List*). If the public key of a Validator Node is removed from the Validator Node List at any time, the relevant node shall immediately cease being a Validator Node and, in particular, shall not validate any transactions on Q.

Article 5.   ROOT NODES

5.1   At any time, a number of nodes on Q (i) up to the Maximum Number of Root Nodes to which the Q Token Holders operating such nodes have Staked Q Tokens and (ii) which are included on the Root Node List shall act as root nodes (each such node, together with the operator of such node, a "**Root Node**").

5.2   Subject to the requirements for inclusion on the Root Node List as set out in Part A (*Mandatory Requirements*) of Appendix 2 (*Root Nodes Selection*), each Q Token Holder may propose the appointment of one or more Eligible Root Node Candidates as Root Nodes or the removal of any one or more existing Root Nodes at any time and to vote on any such proposal in accordance with Appendix 5 (*Voting*).

5.3   Each Root Node shall be responsible for monitoring the functioning of the Q Blockchain in line with this Q Constitution, with the care of a diligent Root Node and in good faith.

In particular, but without limitation, each Root Node is obliged to:

5.3.1   provide such evidence as may reasonably be required by Q Token Holders from time to time that such Root Node satisfies the requirements for inclusion on the Root Node List as set out in Part A (*Mandatory Requirements*) of Appendix 2 (*Root Nodes Selection*) and publicly disclose and provide without undue delay evidence of any changes to such information as may reasonably be required by any Q Token Holder from time to time. A Root Node may, in particular, reference external publicly available sources of information;

5.3.2   operate a full node that supports the Q peer-to-peer network by running a Q client software that reflects the rules of Q as laid down in this Q Constitution;

5.3.3   monitor whether Validator Nodes and Root Nodes act in compliance with their obligations under this Q Constitution and identify any relevant breaches;

5.3.4   subject to Article 5.4, if, at any time, a Validator Node or a Root Node acts in breach of its obligations under this Q Constitution, make a Slashing Proposal in respect of some or all of the Q Tokens Staked to the relevant Validator Node or the relevant Root Node;

5.3.5   subject to Article 5.4, as a strict obligation which the Q Token Holders consider essential to enforce the rules of this Q Constitution and to protect the value of the Q Blockchain:

(a)   if a Slashing Proposal has been accepted in accordance with Appendix 5 (*Voting*), execute a corresponding Slashing Transaction; and

(b)   if an Enforceable Arbitral Award has been rendered, execute a corresponding transaction recording the terms of such Enforceable Arbitral Award and, if applicable, one or more further transactions implementing the terms of such Enforceable Arbitral Award;

5.3.6   subject to Article 5.4, following the occurrence of a Slashing Objection and the expiry of the related Slashing Appeal Period, if such Root Node determines, in its reasonable view, that the relevant Slashed Node has not commenced a Slashing Appeal in accordance with Article 6.3.2, propose a Slashing Confirmation during the Slashing Appeal Verification Period;

5.3.7   vote on each Voting Proposal in respect of which it is an Eligible Voter and vote in respect of each Slashing Transaction during the relevant Slashing Appeal Verification Period in accordance with Article 6.7;

5.3.8   co-sign each block between Validation Cycles which includes the Validator Node List for the next Validation Cycle, if:

(a)   the Validator Node List comprises the Validator Nodes to whom the most Q Tokens have been Staked; and

(b)   such Validator Node List does not contain the public key of any Validator Node whose public key has been included on the Validator

Node Exclusion List in the circumstances described in Article 9.2 (*Validator Node List, Validator Node Exclusion List and Root Node List*);

5.3.9 each time a Validator Node does not implement or otherwise give effect to any Slashing Transaction or any Enforceable Arbitral Award, remove the public key of such Validator Node from the Validator Node List, add the public key of such Validator Node to the Validator Node Exclusion List and propagate such updated Validator Node List and Validator Node Exclusion List via the Q peer-to-peer network;

5.3.10 following any changes to the composition of the group of Root Nodes, update the Root Node List and propagate such updated Root Node List via the Q peer-to-peer network;

5.3.11 where applicable, review and verify each Voting Proposal for compliance with this Q Constitution and, where applicable, in respect of a Voting Proposal which has been accepted, verify that such Voting Proposal has been accepted in compliance with the Quorum and the Required Majority requirements set out in this Q Constitution, in each case, in accordance with Appendix 5 (*Voting*); and

5.3.12 in connection with any arbitration proceedings arising under or in connection with this Q Constitution:

(a) pay all fees it is required to pay in connection with such arbitration proceedings in accordance with this Q Constitution, with the rules applicable to such arbitration proceedings or following an award given at such arbitration proceedings;

(b) conduct such arbitration proceedings properly and independently and, in case of arbitration proceedings arising under or in connection with a Slashing Appeal, act free of conflicting interests and have due regard for the collective interests of the community of Q Stakeholders in the outcome of such arbitration proceedings; and

(c) support to the fullest extent possible any Enforceable Arbitral Award rendered in such arbitration proceedings.

5.4 In the circumstances described in Articles 5.3.4, 5.3.5 and 5.3.6, if any Root Node makes the relevant Slashing Proposal, executes a Slashing Transaction or other transaction or proposes a Slashing Confirmation, each other Root Node's obligation shall instead be to vote on such Slashing Proposal or, as the case may be, Slashing Confirmation in accordance with Appendix 5 (*Voting*) and to support such Slashing Transaction or other transaction.

5.5 Each Root Node agrees and irrevocably accepts that, in case of a breach of its obligations under this Q Constitution, it will be sanctioned by the Slashing of Q Tokens Staked to it in accordance with Article 6 (*Slashing*). In particular, in the event of such breach, any (other) Root Node may make a Slashing Proposal in respect of some or all of the Q Tokens Staked to the relevant Root Node which has breached its obligations and each Eligible Voter may vote on such Slashing Proposal in accordance with Appendix 5 (*Voting*). The severity of the sanctions depends on the gravity of the breach,

as more fully described in Appendix 7 (*Guidelines for Slashing*). They are to be applied with rigour as a central means pursuant to this Q Constitution to incentivize good conduct by Root Nodes generally, to compensate and incentivize those Q Token Holders who exercise supervisory and policing functions, to compensate all Q Token Holders for the general risk assumed and general losses incurred by their entirety due to the conduct of non-compliant Root Nodes, and to limit the risk of future harm occurring.

5.6   Further and in addition, each Root Node agrees to and irrevocably accepts that it shall be removed from the Root Node List in the circumstances described in Article 9.3 (*Validator Node List, Validator Node Exclusion List and Root Node List*). If a Root Node is removed from the Root Node List at any time, the relevant node shall immediately cease being a Root Node and, in particular, shall no longer have any voting rights in its capacity as Root Node.

Article 6.   SLASHING

6.1   In case of a Slashing Proposal made by an Eligible Proposer, each Eligible Voter in respect of such Slashing Proposal shall accept such Slashing Proposal if it is of the view that the relevant Validator Node or Root Node has acted in breach of its obligations under this Q Constitution and the percentage of Q Tokens Staked to the relevant node to be Slashed is proportionate to the severity of the breach, having regard for the Slashing Considerations.

6.2   In connection with each Slashing Proposal, each Root Node and each Validator Node shall propose, implement and otherwise give effect to a corresponding Slashing Transaction in the circumstances described in Article 4.3.3 (*Validator Nodes*) or Article 5.3.5 (*Root Nodes*).

6.3   In respect of each Slashing Transaction, the affected Validator Node or Root Node (the "**Slashed Node**") may:

6.3.1   notify the panel of Root Nodes during the Slashing Objection Period that it intends to request a review of the Slashing (the giving of such notice, a "**Slashing Objection**"); and

6.3.2   only if a Slashing Objection occurs in accordance with Article 6.3.1, commence a review of the Slashing by way of arbitration in accordance with Article 13 (*Dispute Resolution*) by submitting a request for arbitration and paying the relevant filing fee to the Secretariat of the ICC International Court of Arbitration, in each case, during the Slashing Appeal Period (a review requested by a Validator Node, a "**VN Appeal**", and a review requested by a Root Node, an "**RN Appeal**", and each VN Appeal or RN Appeal, a "**Slashing Appeal**").

6.4   A Slashing Appeal shall be the only recourse of the Slashed Node against a Slashing and the Slashed Node shall not initiate other proceedings against a Slashing.

6.5   The respondent Root Node to each Slashing Appeal and, thus, a substitute for the community of Q Stakeholders in the Slashing Appeal, shall be the Eligible Proposer who made the relevant Slashing Proposal. The Eligible Proposer shall be fully autonomous in handling the proceedings and shall not be bound to follow any instructions by any other Q Stakeholder.

6.6   As soon as reasonably practicable after commencing a Slashing Appeal during the Slashing Appeal Period, the Slashed Node shall notify the panel of Root Nodes of the commencement of such Slashing Appeal and shall provide them with reasonable evidence that the request for arbitration has been received by the Secretariat of the ICC International Court of Arbitration and that the Slashed Node has paid the relevant filing fee. As soon as reasonably practicable after receipt of the relevant request for arbitration from the Secretariat of the ICC International Court of Arbitration, the (initial) respondent to the relevant Slashing Appeal shall notify the panel of Root Nodes of such receipt. If, at any time, a Slashing Appeal is withdrawn or considered as withdrawn, as soon as reasonably practicable after such withdrawal or deemed withdrawal, each of the Slashed Node and the each (co-)respondent to the relevant Slashing Appeal shall notify the panel of Root Nodes of such withdrawal or deemed withdrawal and shall provide them with reasonable evidence thereof.

6.7   In respect of each Slashing Objection which occurs, following the expiry of each Slashing Appeal Period, during the Slashing Appeal Verification Period, if any Root Node determines that, in its reasonable view, the Slashed Node has not commenced a Slashing Appeal in accordance with Article 6.3.2, such Root Node shall make a Voting Proposal during the Slashing Appeal Verification Period that the Root Nodes declare that no Slashing Appeal has been commenced (such declaration, a "**Slashing Confirmation**") and the other Root Nodes shall vote on such Voting Proposal in accordance with Appendix 5 (*Voting*). Notwithstanding the preceding sentence, a Root Node shall not be obliged to make a Voting Proposal for a Slashing Confirmation if another Root Node has already made a Voting Proposal for a Slashing Confirmation in respect of the same Slashing Objection. A Slashing Confirmation shall occur if the relevant Voting Proposal is accepted.

6.8   In respect of each Slashing Objection which occurs, if no Slashing Confirmation occurs during the relevant Slashing Appeal Verification Period and if, upon the expiry of the Slashing Appeal Period, the percentage of Q Tokens Staked to the relevant node which are the subject of the relevant Slashing Transaction is higher than the Co-Respondent Threshold, then the panel of Root Nodes shall appoint a co-respondent Root Node for the purposes of such Slashing Appeal. Any Root Node shall be entitled to propose that it or another Root Node be appointed as the co-respondent Root Node and such Root Node shall be so appointed if such proposal is accepted in accordance with Appendix 5 (*Voting*) by no later than the Co-Respondent Appointment Period. If, upon the expiry of the Co-Respondent Appointment Period, no proposal is accepted in accordance with the preceding sentence, the Root Node next in order on the Root Node List shall be automatically appointed as the co-respondent Root Node (starting with the first Root Node on the Root Node List for the purposes of the first Slashing Appeal to which this Article 6.8 applies, then following the order in which the Root Nodes are entered into the Root Node List until the last Root Node on the then current Root Node List is appointed and then (re-)starting with the first Root Node on the then current Root Node List).

6.9   After a co-respondent Root Node is appointed in accordance with Article 6.8, the (initial) respondent Root Node shall make an application to the Arbitral Tribunal that the co-respondent Root Node be joined as co-respondent to the proceedings and, to the extent necessary, each of the relevant Slashed Node and the co-respondent Root Node shall be deemed to support such application. The co-respondent Root Node to each Slashing

Appeal and, thus, also a substitute for the community of Q Stakeholders in the Slashing Appeal, shall be fully autonomous in handling the proceedings and shall not be bound to follow any instructions by any other Q Stakeholder.

6.10   In connection with each Slashing Transaction if (i) a Slashing Objection occurs and (ii) a corresponding Slashing Confirmation does not occur, neither the (initial) respondent Root Node, nor the co-respondent Root Node shall make a settlement proposal which would become legally binding upon acceptance, nor accept a legally binding settlement proposal in respect of such Slashing Appeal unless the (initial) respondent Root Node or, as the case may be, the co-respondent Root Node has put such settlement proposal to a vote and such settlement proposal has been accepted in accordance with Appendix 5 (*Voting*).

6.11   In connection with each Slashing Appeal:

6.11.1   in connection with any application by the parties that any settlement reached between the parties be recorded in the form of an award made by consent of the parties, the Arbitral Tribunal shall verify whether the parties have complied with their obligations under Article 6.10 (and, if the Arbitral Tribunal is not satisfied that the parties have complied with their obligations under Article 6.10, the Arbitral Tribunal shall not record such settlement in the form of an award);

6.11.2   the Arbitral Tribunal shall determine whether the appropriate percentage of Q Tokens Staked to the relevant node should have been equal to or lower than the actual percentage of Q Tokens subject of the relevant Slashing Transaction (but may not determine that the appropriate percentage of Q Tokens Staked to the relevant node to be Slashed should have been higher than the actual percentage of Q Tokens subject to the relevant Slashing Transaction);

6.11.3   the Arbitral Tribunal shall not order the Slashed Node to make any payment or delivery (including, without limitation, it shall not order the payment of any compensation or damages) to any Q Token Holder (including, without limitation, to the Eligible Proposer who initiated the Slashing);

6.11.4   the Arbitral Tribunal may order that the Slashed Node or the (initial) respondent Root Node compensate any costs incurred by any other party to the proceedings in connection with the Slashing Appeal (including, without limitation, any reasonable legal costs).

6.12   Each Validator Node or Root Node which does not comply with its respective obligations with respect to any Slashing Proposal, Slashing Transaction or, as the case may be, Enforceable Arbitral Award under Article 4.3.3 (*Validator Nodes*) or Article 5.3.5 (*Root Nodes*), as applicable, commits a material breach of this Constitution. This breach shall be sanctioned by Slashing in accordance with this Constitution, but other remedies shall also be available. In particular, any Q Stakeholder may request specific performance or cease and desist from the Validator Node or the Root Node breaching its obligations with respect to any Slashing Transaction or any Enforceable Arbitral Award.

Article 7.   WITHDRAWAL OF STAKE

7.1   If a Q Stakeholder has requested the withdrawal of any Q Tokens it has Staked to a node on Q, such Q Tokens shall be released upon the expiry of a Q Token Time Lock Period following such request.

7.2   Notwithstanding Article 7.1, if, during the Q Token Time Lock Period, a Slashing Proposal is made in respect of some or all of the Q Tokens Staked to such node, such Q Tokens shall only be released:

7.2.1   if the Q Stakeholder who has requested the withdrawal of such Q Tokens is not a Q Token Holder operating such node; or

7.2.2   if the Q Stakeholder who has requested the withdrawal of such Q Tokens is a Q Token Holder operating such node, only to the extent such Q Tokens are not Slashed, as described in Appendix 8 (*Withdrawal of Stake Procedure*).

Article 8.   RIGHTS DURING AND FOLLOWING SLASHING

8.1   In connection with each Slashing Proposal:

8.1.1   each affected Q Token Holder shall retain all its rights (other than withdrawal rights) arising out of or in connection with all Q Tokens it has Staked until such time (if any) that a number of Q Tokens Staked by such Q Token Holder equal to the Proposed Slashing Q Tokens are Slashed by way of a corresponding Slashing Transaction; and

8.1.2   each affected Q Token Holder's withdrawal rights arising out of or in connection with any Q Tokens it has Staked shall be determined in accordance with Article 7 (*Withdrawal of Stake*).

8.2   In connection with each Slashing Transaction, during the period (the "**Escrow Period**") between such Slashing Transaction being effected and either:

8.2.1   if a Slashing Objection does not occur, the expiry of the Slashing Objection Period; or

8.2.2   if a Slashing Objection occurs, either:

(a)   the occurrence of a relevant Slashing Confirmation; or

(b)   if a relevant Slashing Confirmation does not occur and:

(i)   if the relevant Slashing Appeal is not withdrawn or considered as withdrawn, an Enforceable Arbitral Award being rendered in respect of such Slashing Appeal; or

(ii)   if the relevant Slashing Appeal is withdrawn or considered as withdrawn, the date of such withdrawal or deemed withdrawal,

all Q Tokens Slashed pursuant to such Slashing Transaction shall be held in escrow effected by way of smart contract. For the avoidance of doubt, if a relevant Slashing Confirmation occurs, the Escrow Period shall end upon the occurrence of such Slashing Confirmation.

8.3   All Q Tokens held in escrow in accordance with Article 8.2 shall be disregarded for all purposes (including, without limitation, for the purposes of determining the number of Q Tokens owned by a Q Token Holder in connection with any allocations and redistributions in accordance with Part A (*Constitutional Parameters*) of Appendix 6 (*Technical Parameters*) and, accordingly, no allocations and redistributions shall be due in respect of such Q Tokens, and for the purposes of determining the number of votes cast by any relevant Q Token Holder for the purposes of any vote conducted in accordance with Appendix 5 (*Voting*)).

8.4   Upon the expiry of the Escrow Period:

8.4.1   if either:

(a)   a Slashing Objection does not occur; or

(b)   a Slashing Confirmation occurs; or

(c)   a Slashing Confirmation does not occur, but the relevant Slashing Appeal is withdrawn or considered as withdrawn,

the Q Tokens shall be released from escrow and shall be allocated and redistributed in accordance with Part A (*Constitutional Parameters*) of Appendix 6 (*Technical Parameters*); or

8.4.2   if a Slashing Objection occurs, a Slashing Confirmation does not occur and the relevant Slashing Appeal is not withdrawn or considered as withdrawn, the Q Tokens shall be released from escrow and each Validator Node and each Root Node shall propose, implement and otherwise give effect to any Enforceable Arbitral Award rendered in respect of such Slashing Appeal in accordance with Article 4.3.3 (*Validator Nodes*) or Article 5.3.5 (*Root Nodes*).

Article 9.   VALIDATOR NODE LIST, VALIDATOR NODE EXCLUSION LIST AND ROOT NODE LIST

9.1   Each time a Validator Node does not implement or otherwise give effect to any Slashing Transaction or any Enforceable Arbitral Award, each Root Node shall remove the public key of such Validator Node from the Validator Node List, thereby triggering a removal of such Validator Node from the Validator Node List, and shall propagate via the Q peer-to-peer network an updated Validator Node List setting out the updated membership of the panel of Validator Nodes.

9.2   Each time the Root Nodes remove the public key of a Validator Node from the Validator Node List in accordance with Article 9.1, each Root Node shall also add the public key of such Validator Node to the Validator Node Exclusion List and shall propagate such updated Validator Node Exclusion List via the Q peer-to-peer network. Once the public

key of any (former) Validator Node is included on the Validator Node Exclusion List, it may not be removed from such list.

9.3   Each time a Q Token Holder makes a Voting Proposal to change the membership of the panel of Root Nodes and such Voting Proposal is accepted by the Required Majority of votes cast by Eligible Voters in accordance with Appendix 5 (*Voting*), the membership of the panel of Root Nodes shall change accordingly and each Root Node shall propagate via the Q peer-to-peer network an updated Root Node List setting out the updated membership of the panel of Root Nodes. For the avoidance of doubt, each Q Token Holder shall be entitled to propose a change to the membership of the panel of Root Nodes in accordance with the preceding sentence at any time in its sole and absolute discretion.

Article 10.   EXPERT PANELS

10.1   Without prejudice to the Q Token Holders' rights under this Q Constitution, the Q Token Holders hereby delegate their decision-making rights with respect to certain technical and operational aspects of Q to expert panels (the "**Expert Panels**").

10.2   The current Expert Panels are set out in Part C (*Expert Panel Parameters*) of Appendix 6 (*Technical Parameters*). Expert Panels may be established or dissolved from time to time if a sufficient number of Q Token Holders amend Part C (*Expert Panel Parameters*) of Appendix 6 (*Technical Parameters*) accordingly. Any proposal for such amendment shall constitute a proposal for amendment to the Appendices to this Q Constitution and shall be decided by way of vote in accordance with Appendix 5 (*Voting*).

10.3   The maximum number of members of each Expert Panel and its decision-making powers are set out in Part C (*Expert Panel Parameters*) of Appendix 6 (*Technical Parameters*). An Expert Panel shall determine its own rules and procedures of working from time to time, *provided that* such rules and procedures are in compliance with this Q Constitution. All members of an Expert Panel shall be Q Token Holders.

10.4   Each Expert Panel shall make determinations and take decisions by way of vote in accordance with Appendix 5 (*Voting*).

10.5   Each Q Token Holder may propose amendments to the membership of any Expert Panel and vote on any such proposal in accordance with Appendix 5 (*Voting*).

Article 11.   Q ID

11.1   Q ID is an application on the Q Blockchain which legal or natural persons can use to certify their identity.

11.2   Following a successful verification of a person as a natural person, such natural person shall be issued with a non-transferable natural person flag on their Q-ID certificate (such Q-ID certificate with a natural person flag, a "**Q Personal ID**").

11.3   The holders of a Q Personal ID (each, a "**Q ID Holder**") shall have certain veto rights in connection with any proposed changes to this Q Constitution, the membership of the panel of Root Nodes or any Expert Panel as set out in Appendix 5 (*Voting*). However, the Q ID Holder's veto rights shall initially be in abeyance and shall only become

effective from such point in time that a sufficient number of Q Token Holders (i) determine that Q has become sufficiently decentralised to prevent an abuse of such veto rights by the Q ID Holders and (ii) amend this Article 11.3 accordingly. Any proposal for such amendment shall constitute a proposal for amendment to the main body of this Q Constitution and shall be decided by way of vote in accordance with Appendix 5 (*Voting*).

Article 12.   INTEGRATED APPLICATIONS

12.1   Q Token Holders may designate any application which:

    12.1.1   is integrated on the Q Blockchain such that, (i) by participating in decisions related to the governance and operation of Q in general, each Q Token Holder directly or indirectly contributes to or impacts the governance and operation of such application and, (ii) in exchange for such participation, each Q Token Holder is entitled to receive a certain number of Q Tokens in accordance with Part A (*Constitutional Parameters*) of Appendix 6 (*Technical Parameters*); and

    12.1.2   which operates as described in Appendix 4 (*Integrated Applications*),

    as a Integrated Application of Q (each, a "**Integrated Application**").

12.2   Notwithstanding the above, there shall be no restrictions on who may access Q and the applications which may be developed on the Q Blockchain by any legal or natural person. In particular, the Q Blockchain shall also support any applications which are not Integrated Applications.

Article 13.   DISPUTE RESOLUTION

13.1   Each Q Stakeholder agrees to be bound by the Dispute Rules. By acquiring and holding Q Tokens or a Q Personal ID, each Q Stakeholder irrevocably agrees to be bound by the Dispute Rules Undertaking. If any person does not accept the Dispute Rules or does not agree to be bound by the Dispute Rules Undertaking, such person must not acquire or hold Q Tokens or a Q Personal ID.

13.2   If any Q Stakeholder breaches the Dispute Rules Undertaking, such Q Stakeholder shall indemnify and hold harmless or compensate (at the creditor's choice) each other Q Stakeholder against any financial disadvantage suffered in connection with such breach and shall release such other Q Stakeholder to the fullest extent possible from any obligation arising under any judgment or ruling by a state court or an arbitral tribunal if such judgment or ruling has been obtained in breach of the Dispute Rules or the Dispute Rules Undertaking.

13.3   All Q Stakeholders are bound by the following arbitration clause:

    13.3.1   All Q Stakeholders agree and irrevocably accept that all disputes arising out of or in connection with this Q Constitution shall be resolved by way of arbitration before an arbitration tribunal (the "**Arbitral Tribunal**") under the Rules of Arbitration of the International Chamber of Commerce (the "**ICC Rules**") and without recourse to the ordinary courts of law. This arbitration agreement shall include, without limitation:

(a)   the holding of and transacting with Q Tokens or Q Personal IDs and any corresponding records on the Q Blockchain;

(b)   disputes about Slashing (in particular, each Slashing Appeal);

(c)   each challenge by a Validator Node of the removal of such Validator Node's public key from the Validator Node List in accordance with Article 9.1 (*Validator Node List, Validator Node Exclusion List and Root Node List*) and the addition of such Validator Node's public key to the Validator Node Exclusion List in accordance with Article 9.2 (*Validator Node List, Validator Node Exclusion List and Root Node List*) made by such Validator Node against the relevant Eligible Proposer (as substitute for the community of Q Stakeholders); and

(d)   any Q Stakeholder's request for specific performance or cease and desist from a Validator Node or from a Root Node which breaches its obligations under this Q Constitution, including, without limitation, its obligations with respect to any Slashing Transaction or any Enforceable Arbitral Award.

13.3.2   Pursuant to Article 30(2)(b) of the current ICC Rules, that the Expedited Procedure Rules shall apply irrespective of the amount in dispute.

13.3.3   If the parties reach a settlement after the file has been transmitted to the Arbitral Tribunal in accordance with the current ICC Rules, the parties shall make a joint request to the Arbitral Tribunal in accordance with Article 33 of the current ICC Rules that the settlement be recorded in the form of an award made by consent of the parties.

13.3.4   In deviation from Articles 37(2), (3) and (4) of the current ICC Rules, any advances on costs in respect of a claim or a counterclaim shall be payable in full by the party making such claim or counterclaim.

13.3.5   In accordance with Articles 38(4) and (5) of the current ICC Rules:

(a)   the final award shall fix the costs of the arbitration and decide which of the parties shall bear them or in what proportion they shall be borne by the parties; and

(b)   in making decisions as to costs, the Arbitral Tribunal may take into account such circumstances as it considers relevant, including the extent to which each party has conducted the arbitration in an expeditious and cost-effective manner. For the avoidance of doubt, the Arbitral Tribunal may give an award on the merits of the dispute in favour of one of the parties and still decide that such party shall bear some or all of the costs of the proceedings.

13.3.6   The seat of the arbitration shall be Zurich, Switzerland.

13.3.7   The language of the arbitration shall be English.

13.3.8   Swiss law shall apply to this arbitration clause.

13.3.9   In its decision, the Arbitral Tribunal shall in particular:

(a)   make a ruling on its jurisdiction, if the latter is contested;

(b)   enforce the rules for Slashing and decide on each Slashing Appeal, having regard for the Slashing Considerations;

(c)   in connection with each Slashing Appeal, rule on or otherwise make a determination in respect of the matters set out in Article 6.11 (if applicable); and

(d)   in each Slashing Appeal in which the Slashed Node pleads that the vote on the relevant Slashing Proposal or the outcome of such vote has not been in compliance with the provisions in Appendix 5 (*Voting*), give a declaratory award which declares whether the vote is valid or not and what the outcome of the vote is, in each case, in compliance with the provisions in Appendix 5 (*Voting*).

For the avoidance of doubt, if an Arbitral Tribunal renders an award requiring a Root Node to make a payment or delivery, the relevant Root Node can satisfy such award by, at its choice, either (1) delivering or surrendering an appropriate number of Q Tokens or (2) paying the monetary equivalent to the relevant number of Q Tokens, in each case, in accordance with the terms of such award (including, in the case of limb (2) above, as to the currency in which such monetary equivalent should be paid and any applicable exchange rate).

13.3.10 Notwithstanding Article 13.3.1, Q Stakeholders may:

(a)   apply to any competent judicial authority for interim or conservatory measures; and

(b)   commence court proceedings supporting arbitral proceedings or relating to arbitral awards including, without limitation, annulment-, exequatur- or enforcement proceedings.

The application by a Q Stakeholder to a judicial authority for such measures or the commencement by a Q Stakeholder of such court proceedings shall not be deemed to be an infringement or a waiver of the arbitration agreement and shall not affect the relevant powers reserved to the Arbitral Tribunal.

13.4   Any Enforceable Arbitral Award shall be published on the Q Blockchain for the purpose of improving the governance and legal certainty of Q for the community of Q Stakeholders.

APPENDIX 1
DEFINITIONS

Capitalised terms used, but not otherwise defined in the Preamble or main body of this Q Constitution or in this Appendix 1 (*Definitions*) shall have the meanings given in Part B (*Technical Definitions*) of Appendix 6 (*Technical Parameters*).

PART A– FIRST-LEVEL DEFINITIONS

(a) "**Aggregate Staked Q Tokens**" means, at any time, in respect of any Q Stakeholder which has Staked Q Tokens to a node on Q, the aggregate number of Q Tokens Staked by such Q Stakeholder to such node at such time.

(b) "**Arbitral Tribunal**" has the meaning given in Article 13.3.1 (*Dispute Resolution*).

(c) "**Co-Respondent Appointment Period**" means, in respect of each Slashing Transaction, a period starting upon the expiry of the relevant Slashing Appeal Verification Period and ending 720 hours (a time period equivalent to 30 days exactly) after the expiry of the relevant Slashing Appeal Verification Period.

(d) "**Dispute Rules**" means the dispute resolution rules set out in this Q Constitution and its Appendices from time to time.

(e) "**Dispute Rules Undertaking**" means the unilateral commitment and undertaking by each Q Token Holder (the "**consenting Q Token Holder**") for the benefit of each other Q Token Holder to accept and observe the Dispute Rules at all times and to ensure that the Dispute Rules are binding on the consenting Q Token Holder at all times.

(f) "**Enforceable Arbitral Award**" means any final arbitral award in respect of which the statutory deadline for annulment proceedings has lapsed or the competent state courts have rejected, wholly or in part, with *res judicata effect* an annulment application.

(g) "**Eligible Root Node Candidate**" means, at any time, a Root Node Candidate which the Root Node Selection Expert Panel has determined satisfies the eligibility criteria and in respect of which the Root Node Selection Expert Panel has issued a statement to that effect which is currently valid.

(h) "**Escrow Period**" has the meaning given in Article 8.2 (*Rights During and Following Slashing*).

(i) "**Expert Panel**" has the meaning given in Article 10.1 (*Expert Panels*).

(j) "**Geographical Region**" means each of the following geographical regions: (i) the USA; (ii) the rest of the Americas; (iii) Far East (China, Japan, Korea); (iv) the rest of Asia; (v) Western Europe; (vi) Eastern Europe; (vii) Middle East and Africa; and (viii) Australia and Oceania.

(k) "**ICC Rules**" has the meaning given in Article 13.3.1 (*Dispute Resolution*).

(l) "**Industry Group**" means each of the following groups: (i) corporate; (ii) financial institution; (iii) fund/investor; (iv) blockchain specialist; (v) not-for-profit; (vi) academic institution; (vii) government or government agency; and (viii) other.

(m)   "**Integrated Application**" has the meaning given in Article 12.1 (*Integrated Applications*).

(n)   "**Proposed Slashing Q Tokens**" means, at any time, in respect of a Slashing Proposal in respect of Q Tokens which have been Staked to a node on Q and in respect of each Q Token Holder which has Staked Q Tokens to such node on Q at such time, the product of (i) the Aggregate Staked Q Tokens at such time, (ii) the Relevant Proportion at such time and (iii) the percentage of Q Tokens Staked to the relevant node subject to the Slashing Proposal, the result rounded down to the nearest $1/10^{18}$ of a Q Token.

(o)   "**Proposing Root Node**" means, in respect of a Slashing Proposal in respect of any Slashing of Q Tokens which have been Staked to a Validator Node or to a Root Node, the Root Node which makes such Slashing Proposal.

(p)   "**Q Constitution**" has the meaning given in Preamble (C).

(q)   "**Q ID Holder**" has the meaning given in Article 11.3 (*Q ID*).

(r)   "**Q Node**" has the meaning given in Article 1.3 (*Supremacy of the Q Constitution*).

(s)   "**Q Personal ID**" has the meaning given in Article 11.2 (*Q ID*).

(t)   "**Q Stakeholder**" has the meaning given in Preamble (C).

(u)   "**Q Token**" has the meaning given in Article 3.1 (*Q Tokens and Q Token Holders*).

(v)   "**Q Token Holder**" has the meaning given in Article 3.2 (*Q Tokens and Q Token Holders*).

(w)   "**Relevant Proportion**" means, at any time, with respect to any Q Tokens Staked by a Q Token Holder to a node on Q:

    (i)   if such Q Token Holder is a Q Token Holder operating such node, the number of Q Tokens Staked by such Q Token Holder to such node on Q at such time *divided by* the aggregate number of Q Tokens Staked to such node on Q at such time by the Q Token Holder(s) operating such node (but excluding any Q Tokens Staked to such node on Q at such time by any Q Token Holder(s) not operating such node); and

    (ii)   if such Q Token Holder is not a Q Token Holder operating such node, nil (0).

(x)   "**Requested Release Q Tokens**" means, in connection with a request by any party for the release of Q Tokens owned and Staked by such party from the relevant Stake, the number of Q Tokens subject to such release request.

(y)   "**RN Appeal**" has the meaning given in Article 6.3.2 (*Slashing*).

(z)   "**Root Node**" has the meaning given in Article 5.1 (*Root Nodes*).

(aa)   "**Root Node Candidate**" means, at any time, each node on Q which wishes to become a Root Node at such time.

(bb) "**Root Node List**" means the list of the (current) panel of Root Nodes which satisfy the requirements for inclusion on the Root Node List as set out in Part A (*Mandatory Requirements*) of Appendix 2 (*Root Nodes Selection*) and whose appointment has been approved by the Required Majority of votes cast by Eligible Voters in accordance with Appendix 5 (*Voting*). The authoritative version of the Root Node List shall be, at any time, the most recent time-stamped version of such list that has been cryptographically signed by at least 75% of the panel of Root Nodes on the immediately preceding authoritative version of the Root Node List.

(cc) To "**Slash**" any Q Tokens and a "**Slashing**" of any Q Tokens which have been Staked to a Validator Node or a Root Node by the Q Token Holder(s) operating such node means the confiscation and redistribution such Q Tokens in accordance with this Q Constitution after such Validator Node or such Root Node has acted in breach of its obligations under this Q Constitution. For the avoidance of doubt, any Q Tokens which have been Staked to a Validator Node by any Q Token Holder(s) not operating such node shall not be subject to Slashing.

(dd) "**Slashed Node**" has the meaning given in Article 6.3 (*Slashing*).

(ee) "**Slashing Appeal**" has the meaning given in Article 6.3.2 (*Slashing*).

(ff) "**Slashing Appeal Period**" means, in respect of each Slashing Transaction, a period starting upon the expiry of the relevant Slashing Objection Period and ending 720 hours (a time period equivalent to 30 days exactly) after the expiry of the relevant Slashing Objection Period.

(gg) "**Slashing Appeal Verification Period**" means, in respect of each Slashing Transaction, a period starting upon the expiry of the relevant Slashing Appeal Period and ending 168 hours (a time period equivalent to 7 days exactly) after the expiry of the relevant Slashing Appeal Period.

(hh) "**Slashing Confirmation**" has the meaning given in Article 6.7 (*Slashing*).

(ii) "**Slashing Considerations**" means, in connection with any Slashing Proposal, each of:

(i) whether the relevant Validator Node or Root Node whose Q Tokens are the subject of such Slashing Proposal has acted in breach of its obligations this Q Constitution;

(ii) the adequate percentage of Q Tokens Staked to the relevant node (if any) to be Slashed in connection with the relevant breach;

(iii) in considering the adequate percentage of Q Tokens Staked to the relevant node (if any) to be Slashed:

(A) whether the relevant breach happened with intent, negligence, or accidentally;

(B) whether the relevant breach was isolated or repeated;

<table>
<tr>
<td>(C)</td>
<td>whether the relevant breach caused economic harm to some or all of the Q Stakeholders, considering also the materiality of such harm;</td>
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<tr>
<td>(D)</td>
<td>the severity of the breach, having regard for Appendix 7 (*Guidelines for Slashing*) and the examples provided therein, which provide guidance on the uniform principles applicable to Slashing; and</td>
</tr>
<tr>
<td>(E)</td>
<td>whether a similar or analogous fact patterns has been considered and whether any applicable guidance has been given in connection with any previous Slashing Transactions or awards of Arbitral Tribunals constituted in accordance with this Q Constitution (to the extent known or otherwise available).</td>
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</table>

(jj) "**Slashing Objection**" has the meaning given in Article 6.3.1 (*Slashing*).

(kk) "**Slashing Proposal**" means, in respect of any Slashing of Q Tokens which have been Staked to a Validator Node or a Root Node and which have been Staked by the Q Token Holder(s) operating such node, the proposal by an Eligible Proposer that such Slashing is effected, including the percentage of Q Tokens Staked to the relevant node by the Q Token Holder(s) operating such node to be Slashed, which shall also specify the name in full, description, address and other contact details of the Eligible Proposer which can be used by the relevant Validator Node or, as the case may be, Root Node for the purposes of identifying the Eligible Proposer in the context of a Slashing Appeal (if any). For the avoidance of doubt, where the Slashing Proposal is in respect of a Validator Node, the Slashing Proposal shall not relate to the Q Tokens which have been Staked to such node by any Q Token Holder(s) not operating such node.

(ll) "**Slashing Objection Period**" means, in respect of each Slashing Transaction, a period of 720 hours (a time period equivalent to 30 days exactly) after the relevant Slashing Transaction being published on the Q Blockchain. For the avoidance of doubt, if an Appeal Intention Confirmation occurs during the Slashing Objection Period, the Slashing Objection Period shall not be shortened and shall expire 720 hours after the relevant Slashing Transaction being published on the Q Blockchain in all circumstances.

(mm) "**Slashing Reward Share**" means, in connection with the Slashing of any Q Tokens Staked to a Validator Node or to a Root Node, the lower of (1) 5% of the Q Tokens Slashed pursuant to the relevant Slashing Transaction and (2) 5% of the Q Tokens Staked to the relevant Proposing Root Node at the time the relevant Slashing Proposal is made.

(nn) "**Slashing Transaction**" means, in respect of each Slashing Proposal which is accepted by the Required Majority of votes cast by Eligible Voters in accordance with Appendix 5 (*Voting*), a corresponding transaction on the Q Blockchain, pursuant to which the percentage of Q Tokens Staked to the relevant node and, where the relevant node is a Validator Node, which have been Staked by the Q Token Holder(s) operating such node, in each case, specified in such Slashing Proposal, rounded down to the nearest $1/10^{18}$ of a Q Token, are confiscated from the relevant Slashed Node and placed in escrow effected by way of smart contract, to be released from escrow and allocated and redistributed in accordance with Article 8.4 (*Rights During and Following Slashing*) upon the expiry of the relevant Escrow Period.

(oo) To "**Stake**" or to "**Stake to a node on Q**" any Q Tokens and a "**Stake**" of any Q Tokens by a Q Token Holder means the delivery of such Q Tokens to a smart contract designated to the address of a particular node on Q for the purposes of "staking" and, as a result, the immobilization of such Q Tokens on the Q Blockchain. If a Q Token Holder has Staked to a node on Q any Q Tokens, such Q Tokens shall remain Staked to such node on Q until such time that (i) the Q Token Holder withdraws such Q Tokens from such Stake or (ii) such Q Tokens are Slashed.

(pp) "**Valid Transaction**" means any transaction on the Q Blockchain which has been validly signed with the private key of the person or entity initiating such transaction, which does not constitute double spending and which is not inconsistent or otherwise constitute a breach of this Q Constitution in any other way.

(qq) "**Validation Cycle**" means the initiation, co-signing and publication on the Q Blockchain of all blocks with Valid Transactions within a CliqueEpochLength.

(rr) "**Validator Node**" has the meaning given in Article 4.1 (*Validator Nodes*).

(ss) "**Validator Node Candidate**" has the meaning given in Article 4.2 (*Validator Nodes*).

(tt) "**Validator Node Exclusion List**" means, at any time, the most recent time-stamped list of the public keys of all (former) Validator Nodes which have been removed from the Validator Node List in the circumstances described in Article 9.1 (*Validator Node List, Validator Node Exclusion List and Root Node List*) and which has been cryptographically signed by at least 75% of the panel of Root Nodes at the relevant time.

(uu) "**Validator Node List**" means the list of the (current) panel of Validator Nodes to which the most Q Tokens have been Staked, which satisfy the Self-Stake Requirement and whose public keys are not included on the Validator Node Exclusion List. The authoritative version of the Validator Node List shall be, at any time, the most recent time-stamped version of such list that has been cryptographically signed by at least 75% of the panel of Root Nodes at the relevant time.

(vv) "**VN Appeal**" has the meaning given in Article 6.3.2 (*Slashing*).

PART B – SECOND-LEVEL DEFINITIONS

(a)   "**Borrowing Fee**" has the meaning given in Paragraph 1(a)(iii) of Appendix 4 (*Integrated Applications*).

(b)   "**Collateralization Ratio**" has the meaning given in Paragraph 1(a)(i) of Appendix 4 (*Integrated Applications*).

(c)   "**Eligible Collateral**" has the meaning given in Paragraph 1(a)(i) of Appendix 4 (*Integrated Applications*).

(d)   "**Eligible Proposer**" means, in respect of a Voting Proposal, any person specified in respect of the relevant type of Voting Proposal in the column "Eligible Proposer" in the table set out in Paragraph 3 of Appendix 5 (*Voting*).

(e)   "**Eligible Q Stakeholder**" means a Q Stakeholder other than a Q Node.

(f)   "**Eligible Voter**" means, in respect of a Voting Proposal, any person specified in respect of the relevant type of Voting Proposal in the column "Eligible Voter" in the table set out in Paragraph 3 of Appendix 5 (*Voting*).

(g)   "**Emergency Proposal**" means any determination by one or more Root Nodes that Q needs to be upgraded without delay and that a failure to do so carries a high likelihood of causing material damage to the interests of the Q Stakeholders (including, without limitation, to remedy any critical security vulnerabilities and remove any exploit opportunities) and associated proposal by one or more Root Nodes of an appropriate upgrade, as determined by such Root Node(s) acting reasonably.

(h)   "**Liquidation Fee**" has the meaning given in Paragraph 1(a)(vii) of Appendix 4 (*Integrated Applications*).

(i)   "**Liquidation Ratio**" has the meaning given in Paragraph 1(a)(vii) of Appendix 4 (*Integrated Applications*).

(j)   "**Oracle**" means, in respect of any level, value or other information, the external price source used for the purposes of obtaining such level, value or other information.

(k)   "**Q Borrowing Platform**" has the meaning given in Paragraph 1 of Appendix 4 (*Integrated Applications*).

(l)   "**Q DeFi**" has the meaning given in Paragraph 1 of Appendix 4 (*Integrated Applications*).

(m)   "**Q ID Veto Quorum**" means in respect of a Voting Proposal which is subject to approval by the Q ID Holders, the quorum of Q ID Holders specified in respect of the approval of the relevant type of Voting Proposal in the column "Q ID Veto Quorum" in the table set out in Paragraph 3 of Appendix 5 (*Voting*).

(n)   "**Q L&B Immobilized Amount**" has the meaning given in Paragraph 1(b) of Appendix 4 (*Integrated Applications*).

(o)   "**Q L&B Loan**" has the meaning given in Paragraph 1(a)(i) of Appendix 4 (*Integrated Applications*).

(p)   "**Q L&B User**" has the meaning given in Paragraph 1(a) of Appendix 4 (*Integrated Applications*).

(q)   "**Q Reserve Share**" means, in connection with any Q Tokens to be allocated or redistributed to the groups of existing Q Stakeholders (other than any Q Nodes), a proportion of such Q Tokens which shall not be allocated or redistributed, but which shall be retained within Q as reserve and used for technical and/or operational purposes to ensure the overall system stability of Q.

(r)   "**QSTC**" has the meaning given in Paragraph 1 of Appendix 4 (*Integrated Applications*).

(s)   "**QSTC Surplus Threshold**" has the meaning given in Paragraph 2 of Appendix 4 (*Integrated Applications*).

(t)   "**Quorum**" means, in respect of a Voting Proposal, the quorum of Eligible Voters specified in respect of the relevant type of Voting Proposal in the column "Quorum" in the table set out in Paragraph 3 of Appendix 5 (*Voting*). If the Eligible Voters are Q Token Holders, the Quorum shall be determined as a percentage of the aggregate number of votes associated with all Q Tokens in existence at the time of the relevant Voting Proposal.

(u)   "**Quorum Required for Supermajority**" means, in respect of a Voting Proposal, the quorum of Eligible Voters specified in respect of the relevant type of Voting Proposal in the column "Quorum Required for Supermajority" in the table set out in Paragraph 3 of Appendix 5 (*Voting*). If the Eligible Voters are Q Token Holders, the Quorum Required for Supermajority shall be determined as a percentage of the aggregate number of votes associated with all Q Tokens in existence at the time of the relevant Voting Proposal.

(v)   "**Required Majority**" means, in respect of a Voting Proposal, the percentage of votes cast by Eligible Voters in favour of such Voting Proposal which is necessary for the relevant type of Voting Proposal to be accepted as specified in the column "Required Majority" in the table set out in Paragraph 3 of Appendix 5 (*Voting*). If the Eligible Voters are Q Token Holders, the Required Majority shall be determined as a percentage of the aggregate number of votes associated with the Q Tokens held by the Q Token Holders who cast their votes during the Voting Period, where each Q Token Holder shall have one (1) vote in respect of each $1/10^{18}$ of a Q Token held by it. If the Eligible Voters are Root Nodes or members of an Expert Panel, the Required Majority shall be determined as a percentage of the aggregate number of votes which can be cast by the panel of Root Nodes or the relevant Expert Panel during the Voting Period, where each Root Node or member of the relevant Expert Panel shall have one (1) vote.

(w)   "**Required Supermajority**" means, in respect of a Voting Proposal, the percentage of votes cast by Eligible Voters in favour of such Voting Proposal which is necessary for the relevant type of Voting Proposal to be accepted as specified in the column "Required Supermajority" in the table set out in Paragraph 3 of Appendix 5 (*Voting*). If the Eligible Voters are Q Token Holders, the Required Supermajority shall be determined as a percentage of the aggregate number of votes associated with the Q Tokens held by the

Q Token Holders who cast their votes during the Voting Period, where each Q Token Holder shall have one (1) vote in respect of each $1/10^{18}$ of a Q Token held by it. If the Eligible Voters are Root Nodes or members of an Expert Panel, the Required Supermajority shall be determined as a percentage of the aggregate number of votes which can be cast by the panel of Root Nodes or the relevant Expert Panel during the Voting Period, where each Root Node or member of the relevant Expert Panel shall have one (1) vote.

(x)   "**Stabilization Reward**" has the meaning given in Paragraph 1(b) of Appendix 4 (*Integrated Applications*).

(y)   "**Undercollateralized Q L&B User**" has the meaning given in Paragraph 1(a)(vii) of Appendix 4 (*Integrated Applications*).

(z)   "**Voting Period**" means, in respect of a Voting Proposal, the period during which Eligible Voters are entitled to vote in respect of the relevant type of Voting Proposal as specified in the column "Voting Period" in the table set out in Paragraph 3 of Appendix 5 (*Voting*).

(aa)   "**Voting Proposal**" means any proposal affecting Q made by a Q Stakeholder in accordance with this Constitution which is put to a vote by some or all Q Stakeholders in accordance with Appendix 5 (*Voting*).

APPENDIX 2
ROOT NODES SELECTION

PART A – MANDATORY REQUIREMENTS

1.   Each Root Node shall:

(i)   confirm its identity, ownership and control structure;

(ii)   confirm its residence or, in the case of legal persons, jurisdiction of incorporation;

(iii)   expressly accept, sign and make available for inspection by any Q Stakeholder a signed copy of this Q Constitution. For the purposes of this sub-paragraph (iii), a Root Node may sign this Q Constitution by signing electronically a hash of this Q Constitution;

(iv)   be resident or, in the case of legal persons, incorporated in one or more jurisdictions, each of which is a signatory to and has ratified the New York Convention and in which foreign arbitral awards are regularly enforced without undue delay in accordance with the terms of the Convention on the Recognition and Enforcement of Foreign Arbitral Awards of 1958 (the so-called New York Convention).

PART B – ELIGIBILITY CRITERIA

1.   Each Root Node Candidate shall contact the Root Node Selection Expert Panel and provide such information as may be requested by any member of the Root Node Selection Expert Panel to assess whether such Root Node Candidate is an Eligible Root Node Candidate.

2.   To assess whether any Root Node Candidate is an Eligible Root Node Candidate, the Root Node Selection Expert Panel shall assess (i) the number of Q Tokens Staked to such Root Node Candidate in accordance with Paragraph 5, (ii) the industry classification of such Root Node Candidate in accordance with Paragraph 6 and (iii) the geographical classification of such Root Node Candidate in accordance with Paragraph 7.

3.   Following such assessment, the Root Node Selection Expert Panel shall assign to each Root Node Candidate and to each member of the then current panel of Root Nodes a score as described in each of those Paragraphs. For the purposes of assigning a score to a Root Node Candidate or any member of the then current panel of Root Nodes, the Root Node Selection Expert Panel shall not take into account the impact to such score or any other Root Node Candidate(s) at the same time.

4.   The Root Node Selection Expert Panel shall determine that a Root Node Candidate satisfies the eligibility criteria:

(i)   automatically, if there are fewer than the Maximum Number of Root Nodes on the panel of Root Nodes; and, otherwise

(ii)   if the aggregate score assigned to such Root Node Candidate is greater than the aggregate score assigned to at least one member of the then current panel of Root Nodes.

If the Root Node Selection Expert Panel determines that a Root Node Candidate satisfies the eligibility criteria in accordance with the preceding sentence, the Root Node Selection Expert Panel shall issue a statement confirming that it has made such determination which shall be valid for a period of 168 hours.

5.   *Number of Q Tokens Staked.* The Root Node Selection Expert Panel shall rank the Root Node Candidate and the members of the then current panel of Root Nodes in terms of the number of Q Tokens Staked to them by the Q Token Holders operating such nodes. The node with most Q Tokens Staked shall be assigned a score of 100 and the remaining nodes shall be assigned scores corresponding to their rank in decreasing integrals of one (1), floored at zero (0). If two or more nodes have the same number of Q Tokens Staked, they shall be assigned equal score. The score assigned to the node with the next lower number of Q Tokens Staked shall not be the next lower integral number, but shall take into account the number of immediately preceding two or more nodes assigned equal score. The highest score a node may receive for the number of Q Tokens Staked to such node shall be 100 and the lowest score shall be zero (0).

6.   *Industry Classification.* The Root Node Selection Expert Panel shall assign the Root Node Candidate and each member of the then current panel of Root Nodes to an Industry Group. The Root Node Selection Expert Panel shall then assign a score to each node, equal to 50 *divided by* the number of nodes who are assigned to the same Industry Group. The highest score a node may receive for its industry classification shall be 50 and the lowest score shall be 0.49 (being 50 *divided by* 102, rounded to two decimal places).

7.   *Geographical Classification.* The Root Node Selection Expert Panel shall assign the Root Node Candidate and each member of the then current panel of Root Nodes to a Geographical Region. The Root Node Selection Expert Panel shall then assign a score to each node, equal to 50 *divided by* the number of nodes who are assigned to the same Geographical Region. The highest score a node may receive for its geographical classification shall be 50 and the lowest score shall be 0.49 (being 50 *divided by* 102, rounded to two decimal places).

APPENDIX 3
TRANSACTION FEES

1.   Transaction fees shall be calculated and charged in Q Tokens.

2.   Transaction fees charged by Validator Nodes shall be allocated between the Q Stakeholders (other than the Q Nodes) in accordance with Part A (*Constitutional Parameters*) of Appendix 6 (*Technical Parameters*).

3.   The transaction fees charged by the Validator Nodes in respect of each transaction on Q shall take into account the computational, storage and other costs incurred by the Validator Nodes in validating the state of Q and recording the relevant transaction on the Q Blockchain.

4.   The rate(s) at which the Validator Nodes shall charge transaction fees shall be determined by the Q Fees & Incentives Expert Panel from time to time and shall be such that, after the applicable transaction fees incurred in connection with a transaction on Q are allocated between the groups of existing Q Stakeholders (other than the Q Nodes) in accordance with Part A (*Constitutional Parameters*) of Appendix 6 (*Technical Parameters*), the amount so allocated to the Validator Nodes is at least equal to the relevant computational, storage and other costs incurred by the Validator Nodes in validating the state of Q and recording the relevant transaction on the Q Blockchain.

APPENDIX 4
INTEGRATED APPLICATIONS

1. The Q Decentralized Finance System ("**Q DeFi**") is a Integrated Application on the Q Blockchain, comprising a borrowing platform ("**Q Borrowing Platform**") and a Q stablecoin ("**QSTC**").

(a) The Q Borrowing Platform allows users (each, a "**Q L&B User**") to draw loans in QSTC against delivery of collateral. The key features of the Q Borrowing Platform with respect to loans in QSTC shall be as follows:

    (i) Each Q L&B User may deliver tokenized assets as determined by the Q DeFi Expert Panel from time to time ("**Eligible Collateral**") as collateral to the Q Borrowing Platform by way of smart contract. Following delivery of such Eligible Collateral, the relevant Q L&B User may draw one or more loans (each, a "**Q L&B Loan**") in QSTC in an amount up to the quotient of the value of the Eligible Collateral delivered divided by the relevant collateralization ratio in respect of such type of Eligible Collateral as determined by the Q DeFi Expert Panel from time to time (the "**Collateralization Ratio**").

    (ii) The relevant Q L&B User may (but shall not be required to) deliver further Eligible Collateral from time to time.

    (iii) The relevant Q L&B User shall be entitled to the return of any Eligible Collateral previously delivered in an amount equal to the excess between (I) the aggregate of the quotient of the value of each type of Eligible Collateral previously delivered divided by the relevant Collateralization Ratio and (II) the aggregate principal amount of all Q L&B Loans they have drawn and which are outstanding and the aggregate of all accrued borrowing fees as determined by the Q DeFi Expert Panel from time to time (each, a "**Borrowing Fee**"). The relevant Q L&B User shall be entitled to the return of all Eligible Collateral delivered against repayment of all Q L&B Loans which are outstanding and the aggregate of all accrued Borrowing Fees.

    (iv) Each Q L&B Loan shall not have a fixed maturity date, but shall be repayable at the option of the relevant Q L&B User.

    (v) Each Q L&B User shall pay a Borrowing Fee in QSTC determined by reference to the principal amount of each Q L&B Loan they have drawn and which is outstanding. The Borrowing Fee shall be due upon repayment of the relevant Q L&B Loan.

    (vi) No payments or deliveries shall be due from a Q L&B User in respect of any Q L&B Loan other than (I) the initial delivery of Eligible Collateral, (II) the payment of a Borrowing Fee in respect of such Q L&B Loan and (III) the repayment of such Q L&B Loan.

    (vii) Should the aggregate value of all Eligible Collateral delivered by a Q L&B User (the "**Undercollateralized Q L&B User**") fall below a pre-defined threshold as determined by the Q DeFi Expert Panel from time to time (the "**Liquidation Ratio**"), the Q Borrowing Platform shall auction such Eligible Collateral. Such

auction of collateral shall be open to all Q Token Holders and all bids shall be denominated in QSTC. Upon the conclusion of the auction, (I) the relevant Eligible Collateral shall be transferred to the highest bidder, (II) any excess of the amount paid by the highest bidder over the sum of (x) the aggregate principal amount outstanding of the Q L&B Loans drawn by the Undercollateralized Q L&B User, (y) the aggregate of all accrued Borrowing Fees in respect of such Q L&B Loans and (z) a fee covering the cost of auctioning or selling the relevant Eligible Collateral as determined by the Q DeFi Expert Panel from time to time (the "**Liquidation Fee**") shall be transferred to the Undercollateralized Q L&B User and (III) the Undercollateralized Q L&B User shall not be required to repay the outstanding Q L&B Loans or to pay the accrued Borrowing Fees and shall no longer be entitled to the return of the Eligible Collateral originally delivered.

(viii)   The value of any Eligible Collateral delivered shall be determined from time to time by Oracles in respect of the relevant type of collateral as determined by the Q DeFi Expert Panel from time to time.

(b)   The Q Borrowing Platform also allows Q L&B Users to immobilize a number of QSTC (the "**Q L&B Immobilized Amount**") in the Q Borrowing Platform by way of smart contract against receipt of a stabilization reward (the "**Stabilization Reward**") in QSTC determined by reference to the number of QSTC comprising the Q L&B Immobilized Amount. Any Q L&B Immobilized Amount shall be immediately released from the relevant smart contract upon request by the relevant Q L&B User. The accrued Stabilization Reward in respect of any Q L&B Immobilized Amount shall be paid to the relevant Q L&B User upon release of such Q L&B Immobilized Amount.

(c)   QSTC is the first stablecoin to be issued on Q DeFi. The key features of QSTC shall be as follows:

(i)   QSTC shall be issued when Q L&B Users draw Q L&B Loans. QSTC shall be burned when Q L&B Users repay Q L&B Loans or when the Eligible Collateral in respect of Q L&B Loans has been auctioned.

(ii)   The value of QSTC shall be pegged against the value of the US-Dollar.

2.   All Borrowing Fees paid by Q L&B Users (including an amount corresponding to any Borrowing Fees economically retained within the Q Borrowing Platform as part of the auction or sale of Eligible Collateral in accordance with Paragraph 1(a)(vii) above) shall be paid in QSTC and shall be used to build up a reserve on the Q Borrowing Platform. The amount of QSTC standing to the credit of such reserve shall be used to pay any relevant Stabilization Rewards which have accrued and are due in accordance with Paragraph 1(b) above. If, at any time, the amount of QSTC standing to the credit of such reserve exceeds the surplus threshold determined by the Q DeFi Expert Panel and applicable at such time (the "**QSTC Surplus Threshold**"), the Q Borrowing Platform shall auction an amount of QSTC equal to such excess. Such auction of collateral shall be open to all Q Token Holders and all bids shall be denominated in Q Tokens. Upon the conclusion of the auction, (I) the relevant amount of QSTC shall be transferred to the highest bidder in exchange for the relevant number of Q Tokens which have been bid and (II) such Q Tokens shall be redistributed between the groups of existing Q Stakeholders in accordance with Part A (*Constitutional Parameters*) of Appendix 6 (*Technical Parameters*).

APPENDIX 5
VOTING

1.	In connection with each Voting Proposal, if the Eligible Voters are:

(a)	Q Token Holders, each Q Token Holder shall have one (1) vote in respect of each $1/10^{18}$ of a Q Token held by it;

(b)	Root Nodes, each Root Node shall have one (1) vote; and

(c)	the members of an Expert Panel, each member of such Expert Panel shall have one (1) vote.

2.	Subject to Paragraph 3, in connection with each Voting Proposal:

(a)	such Voting Proposal shall be made by an Eligible Proposer and propagated on the Q peer-to-peer network;

(b)	each Validator Node shall validate a corresponding transaction recording the terms of the Voting Proposal on the Q Blockchain without undue delay;

(c)	all Eligible Voters may vote on the Voting Proposal within the Voting Period. In respect of each Voting Proposal, the Eligible Voters may either accept or reject such Voting Proposal;

(d)	if there is no Quorum of Eligible Voters voting in respect of a Voting Proposal within the Voting Period, the Voting Proposal shall be rejected;

(e)	if there is Quorum of Eligible Voters voting in respect of a Voting Proposal within the Voting Period:

(i)	if there is not a Required Majority of votes cast by Eligible Voters comprising the Quorum, the Voting Proposal shall be rejected;

(ii)	if there is a Required Majority of votes cast by Eligible Voters comprising the Quorum, the Voting Proposal shall be accepted, subject to Paragraphs (f) and (g); and

(iii)	if there is a Required Supermajority of votes cast by Eligible Voters comprising the Quorum Required for Supermajority, the Voting Proposal shall be accepted;

(f)   if the Voting Proposal is accepted in accordance with Paragraph (e)(ii) and is subject to approval by each Root Node as indicated in the column "Root Node Validation Period" in the table set out in Paragraph 3, each Root Node shall verify whether, in its reasonable discretion, such Voting Proposal is in compliance with this Q Constitution. In such circumstances, such Voting Proposal shall nonetheless be rejected if, within the Root Node Validation Period indicated in the column "Root Node Validation Period" in the table set out in Paragraph 3, more than 50% of the Root Nodes declare that, in their reasonable view, such Voting Proposal is not in compliance with this Q Constitution. For the avoidance of doubt, if the Voting Proposal is accepted in accordance with Paragraph (e)(iii), this Paragraph (f) shall not apply;

(g)   if the Voting Proposal is accepted in accordance with Paragraph (e)(ii) and, if applicable, is not rejected in accordance with Paragraph (f) and, further, is subject to approval by the Q ID Holders as indicated in the column "Q ID Veto Period" in the table set out in Paragraph 3 and if the veto rights of Q ID Holders have become effective in accordance with Article 11.3 (*Q ID*), each Q ID Holder may exercise its veto right. In such circumstances, such Voting Proposal shall nonetheless be rejected if, within the relevant period indicated in the column "Q ID Veto Period" in the table set out in Paragraph 3, more than 50% of the Q ID Veto Quorum of Q ID Holders exercise their veto right in respect of such Voting Proposal. For the avoidance of doubt, if the Voting Proposal is accepted in accordance with Paragraph (e)(iii), this Paragraph (g) shall not apply;

(h)   if the Voting Proposal is accepted in accordance with Paragraphs (e)(ii) or (e)(iii) and, if applicable, is not rejected in accordance with either Paragraph (f) or Paragraph (g) above, each Validator Node shall validate a transaction on the Q Blockchain recording such Voting Proposal and such Voting Proposal shall be implemented without undue delay.

3.   For the purposes of Paragraph 2 above:

Subject of Voting Proposal:	Eligible Proposer: [EP]	Eligible Voters: [EV]	Voting Period: [VP]	Quorum: [QRM]	Required Majority: [RMAJ]	Quorum Required for Supermajority: [SQRM]	Required Supermajority: [SMAJ]	Root Node Validation Period: [RNVALP]	Q ID Veto Period [QIDVTP]	Q ID Veto Quorum: [QIDVTQRM]
Changes to the fundamental principles of Q set out in the Preamble to this Q Constitution [fundQSection]	Any Q Token Holder	Q Token Holders	336 hours	75%	75%	N/A	N/A	168 hours	168 hours	10%

Subject of Voting Proposal:	Eligible Proposer: [EP]	Eligible Voters: [EV]	Voting Period: [VP]	Quorum: [QRM]	Required Majority: [RMAJ]	Quorum Required for Supermajority: [SQRM]	Required Supermajority: [SMAJ]	Root Node Validation Period: [RNVALP]	Q ID Veto Period [QIDVTP]	Q ID Veto Quorum: [QIDVTQRM]
Changes to the main body of this Q Constitution, to any definitions contained in Part A (*First-Level Definitions*) of Appendix 1 (*Definitions*) or in Part B (*Technical Definitions*) of Appendix 6 (*Technical Parameters*) to this Q Constitution [basicQSection]	Any Q Token Holder	Q Token Holders	336 hours	25%	75%	N/A	N/A	168 hours	168 hours	10%
Changes to any of the Appendices to this Q Constitution other than the definitions contained in Part A (*First-Level Definitions*) of Appendix 1 (*Definitions*) or in Part B (*Technical Definitions*) of Appendix 6 (*Technical Parameters*) to this Q Constitution [detailedQSection]	Any Q Token Holder	Q Token Holders	336 hours	5%	more than 50% of the votes cast	N/A	N/A	168 hours	168 hours	10%
Changes to Q which do not amount to changes to this Q Constitution	Any Q Token Holder	Q Token Holders	168 hours	1%	more than 50% of	N/A	N/A	N/A	N/A	N/A

Subject of Voting Proposal:	Eligible Proposer: [EP]	Eligible Voters: [EV]	Voting Period: [VP]	Quorum: [QRM]	Required Majority: [RMAJ]	Quorum Required for Supermajority: [SQRM]	Required Supermajority: [SMAJ]	Root Node Validation Period: [RNVALP]	Q ID Veto Period [QIDVTP]	Q ID Veto Quorum: [QIDVTQRM]
[changeQnotConst]					the votes cast					
Emergency Proposal	Any Root Node	Root Nodes	24 hours	50%	more than 50% of the votes cast	N/A	N/A	N/A	N/A	N/A
Any appointment of an Eligible Root Node Candidate to the panel of Root Nodes or any removal of a Root Node from the panel of Root Nodes [addOrRemRoot]	Any Q Token Holder	Q Token Holders	336 hours	5%	more than 50% of the votes cast	25%	75%	168 hours	168 hours	10%
Slashing Proposal in respect of Q Tokens Staked to a Validator Node [valSlashing]	Any Root Node	Root Nodes	336 hours	50%	more than 50% of the votes cast	N/A	N/A	N/A	N/A	N/A
Slashing Proposal in respect of Q Tokens Staked to a Root Node [rootSlashing]	Any Root Node or any Q ID Holder	Q Token Holders	336 hours	0%	more than 50% of the votes cast	25%	75%	168 hours	N/A	N/A

Subject of Voting Proposal:	Eligible Proposer: [EP]	Eligible Voters: [EV]	Voting Period: [VP]	Quorum: [QRM]	Required Majority: [RMAJ]	Quorum Required for Supermajority: [SQRM]	Required Supermajority: [SMAJ]	Root Node Validation Period: [RNVALP]	Q ID Veto Period [QIDVTP]	Q ID Veto Quorum: [QIDVTQRM]
Slashing Confirmation	Any Root Node	Root Nodes	336 hours	0%	more than 50% of the votes cast	N/A	N/A	N/A	N/A	N/A
Settlement proposal received or to be made by respondent Root Node or Q ID Holder or co-respondent Root Node in a Slashing Appeal	Any respondent Root Node or Q ID Holder or co-respondent Root Node in such Slashing Appeal	Root Nodes	336 hours	0%	more than 50% of the votes cast	N/A	N/A	N/A	N/A	N/A
Proposal that a Root Node be appointed as the co-respondent Root Node in a Slashing Appeal	Any Root Node	Root Nodes	336 hours	0%	more than 50% of the votes cast	N/A	N/A	N/A	N/A	N/A
Any amendment to membership of the Fees & Incentives Expert Panel [EPQFI.addOrRemExpert]	Any Q Token Holder	Q Token Holders	336 hours	0%	more than 50% of the votes cast	N/A	N/A	168 hours	168 hours	10%

Subject of Voting Proposal:	Eligible Proposer: [EP]	Eligible Voters: [EV]	Voting Period: [VP]	Quorum: [QRM]	Required Majority: [RMAJ]	Quorum Required for Supermajority: [SQRM]	Required Supermajority: [SMAJ]	Root Node Validation Period: [RNVALP]	Q ID Veto Period [QIDVTP]	Q ID Veto Quorum: [QIDVTQRM]
Any amendment to membership of the DeFi Expert Panel [EPDR.addOrRemExpert]	Any Q Token Holder	Q Token Holders	336 hours	0%	more than 50% of the votes cast	N/A	N/A	168 hours	168 hours	10%
Any amendment to membership of the Root Node Selection Expert Panel	Any Q Token Holder	Q Token Holders	336 hours	0%	more than 50% of the votes cast	N/A	N/A	168 hours	168 hours	10%
Any decision by the Fees & Incentives Expert Panel [EPQFI.changeParam]	Any member of such Expert Panel	Members of relevant Expert Panel	168 hours	0%	more than 50% of the votes cast	N/A	N/A	168 hours	N/A	N/A
Any decision by the DeFi Expert Panel [EPDR.changeParam]	Any member of such Expert Panel	Members of relevant Expert Panel	168 hours	0%	more than 50% of the votes cast	N/A	N/A	168 hours	N/A	N/A
Any decision by the Root Node Selection Expert Panel	Any member of such Expert Panel	Members of relevant Expert Panel	168 hours	0%	more than 50% of the votes cast	N/A	N/A	168 hours	N/A	N/A

APPENDIX 6
TECHNICAL PARAMETERS

PART A – CONSTITUTIONAL PARAMETERS

1.   Each time additional Q Tokens are generated by way of inflation subsidy in accordance with Article 3.4 (*Q Tokens and Q Token Holders*), such Q Tokens shall be allocated between the groups of existing Q Stakeholders (other than Q Nodes) as follows:

Q Stakeholders:	Target percentage of Q Tokens allocated to such Q Stakeholders:
Q Token Holders	50%
Q ID Holders	n/a until amendment in accordance with Article 11.3
Validator Nodes and Validator Node Candidates	40%
Root Nodes	10%

provided that the actual percentage in respect of each allocation may be higher or lower than the target percentage and shall be as determined by the Q Fees & Incentives Expert Panel from time to time, having regard for the integrity, efficiency and robustness of Q overall.

2.   In connection with any Q Tokens charged by Validator Nodes by way of transaction fees in accordance with Appendix 3 (*Transaction Fees*), the applicable Q Reserve Share of such Q Tokens shall be retained within Q as reserve and the remainder shall be allocated between the groups of existing Q Stakeholders (other than Q Nodes) as follows:

Q Stakeholders:	Target percentage of Q Tokens allocated to such Q Stakeholders:
Q Token Holders	50%
Q ID Holders	n/a until amendment in accordance with Article 11.3
Validator Nodes and Validator Node Candidates	40%
Root Nodes	10%

provided that the actual percentage in respect of each allocation may be higher or lower than the target percentage and shall be as determined by the Q Fees & Incentives Expert Panel from time to time, having regard for the overall system stability of Q.

3.   In connection with each Slashing Transaction which takes place in accordance with Article 6 (*Slashing*), (i) a number of Slashed Q Tokens equal to the relevant Slashing Reward Share shall be allocated to the relevant Proposing Root Node, (ii) the applicable Q Reserve Share of the Slashed Q Tokens after such allocation shall be retained within Q and (iii) the remaining Slashed Q Tokens shall be redistributed between the groups of existing Q Stakeholders (other than Q Nodes) as follows:

Q Stakeholders:	Target percentage of Q Tokens redistributed to such Q Stakeholders:
Q Token Holders	50%
Q ID Holders	n/a until amendment in accordance with Article 11.3
Validator Nodes and Validator Node Candidates	40%
Root Nodes	10%

provided that the actual percentage in respect of each redistribution may be higher or lower than the target percentage and shall be as determined by the Q Fees & Incentives Expert Panel from time to time, having regard for the overall system stability of Q.

4.   In connection with any Borrowing Fees converted into Q Tokens in accordance with Appendix 4 (*Integrated Applications*), a relevant number of Q Tokens shall be used to pay any relevant Stabilization Rewards (if applicable), the applicable Q Reserve Share of the Q Tokens after such payment shall be retained within Q and the remainder shall be allocated between the groups of existing Q Stakeholders (other than Q Nodes) as follows:

Q Stakeholders:	Target percentage of Q Tokens allocated to such Q Stakeholders:
Q Token Holders	50%
Q ID Holders	n/a until amendment in accordance with Article 11.3
Validator Nodes and Validator Node Candidates	40%
Root Nodes	10%

provided that the actual percentage in respect of each allocation may be higher or lower than the target percentage and shall be as determined by the Q Fees & Incentives Expert Panel from time to time, having regard for the integrity, efficiency and robustness of Q overall.

5.   Within each relevant group of Q Stakeholders (other than Q Nodes), any Q Tokens allocated or redistributed to such group of Q Stakeholders shall be allocated to the members of such group as follows:

(a)   to the Q Token Holders, *pro rata* to the number of Q Tokens held by each Q Token Holder;

(b)   to the Q ID Holders, *equally* to each Q ID Holder;

(c)   to the Validator Nodes, *equally* to each Validator Node;

(d)   to the Validator Node Candidates, *equally* to each Validator Node Candidate; and

(e)   to the Root Nodes, *equally* to each Root Node,

         or, if such *pro rata* or equal allocation or redistribution is not practicably possible, such other allocation or redistribution as shall be determined by the Q Fees & Incentives Expert Panel from time to time, having regard for the target allocation or redistribution set out above and for the integrity, efficiency and robustness of Q overall.

6.   Any Q Tokens to be allocated or redistributed to the groups of existing Q Stakeholders (other than Q Nodes) shall be held in escrow effected by way of smart contract.

7.   Each Eligible Q Stakeholder may claim the Q Tokens allocated or redistributed to such Q Stakeholder from time to time in accordance with this Appendix 6 (*Technical Parameters*) by claiming such Q Tokens from such smart contract during the applicable. If a Q Stakeholder does not claim any Q Tokens allocated or redistributed to it during the applicable, such Q Stakeholder shall lose its entitlement to such Q Tokens and shall no longer be able to claim them. For the avoidance of doubt, each allocation and/or redistribution of Q Tokens shall give rise to a separate in respect of each Q Token.

PART B – TECHNICAL DEFINITIONS

Capitalised terms used, but not otherwise defined in the Preamble or main body of this Q Constitution or in this Part B (*Technical Definitions*) of Appendix 6 (*Technical Parameters*) shall have the meanings given in Appendix 1 (*Definitions*).

(a)   "**Block Subsidy**" (*BlockSubsidy*) means 5 Q Tokens.

(b)   "**CliqueEpochLength**" means the number of blocks which are produced within one consensus cycle by a set of given Validators.

(c)   "**Co-Respondent Threshold**" means, in respect of each Slashing Objection which occurs, if no Slashing Confirmation occurs during the relevant Slashing Appeal Verification Period, 10% of the aggregate number of Q Tokens Staked to such node on Q at such time by the Q Token Holder(s) operating such node (but excluding any Q Tokens Staked to such node on Q by any Q Token Holder(s) not operating such node) determined as of the expiry of the Slashing Appeal Period.

(d)   "**Maximum Number of Experts**" (*NumberExperts*) means, at any time, 21 experts per Expert Panel.

(e)   "**Maximum Number of Root Nodes**" (*NumberofRootNodes*) means, at any time, 20 nodes on Q.

(f)   "**Maximum Number of Validator Nodes**" (*NumberOfActiveValidators*) means, at any time, 101 nodes on Q.

(g)   "**Number of Validator Node Candidates**" (*NumberOfStandbyValidators*) means, at any time: (i) if, at such time, the number of nodes on Q acting as Validator Nodes are fewer than the Maximum Number of Validator Nodes, nil (0); and (ii) if, at such time, the number of nodes on Q acting as Validator Nodes is equal to the Maximum Number of Validator Nodes, the lower of 35 and the number of nodes on Q which are not Validator Nodes, but which have Staked Q Tokens, which satisfy the Self-Stake Requirement and whose public keys are not included on the Validator Node Exclusion List.

(h)   "**Q Token Time Lock Period**" (*QTimelock*) means, in connection with a request by any party for the release of Q Tokens owned and Staked by such party from the relevant Stake, a period of 504 hours (a time period equivalent to 21 days exactly) after such request is made.

(i)   The "**Self-Stake Requirement**" shall be satisfied by a node on Q at any time if, at such time, at least 5% of the Q Tokens Staked to such node are Staked by the Q Token Holder(s) operating such node.

PART C – EXPERT PANEL PARAMETERS

1.   The Q DeFi Expert Panel shall be responsible for taking decisions on certain technical and operational aspects of Q DeFi (as described in Appendix 4 (*Integrated Applications*)). In particular:

(a)   The Q DeFi Expert Panel shall consist of up to the Maximum Number of Experts.

(b)   The competence of the Q DeFi Expert Panel shall be as follows:

   (i)   The Q DeFi Expert Panel shall determine what currencies and assets constitute Eligible Collateral for the purposes of the Q Borrowing Platform.

   (ii)   The Q DeFi Expert Panel shall determine the Oracles to be used for the purposes of determining the value of each type of Eligible Collateral from time to time.

   (iii)   The Q DeFi Expert Panel shall determine the Collateralization Ratio and the Liquidation Ratio for each type of Eligible Collateral.

   (iv)   The Q DeFi Expert Panel shall determine the concentration limits (if any) in respect of each type of Eligible Collateral from time to time.

   (v)   The Q DeFi Expert Panel shall set the Liquidation Fees applicable to auctions of Eligible Collateral from time to time.

   (vi)   The Q DeFi Expert Panel shall set the Borrowing Fees applicable to Q L&B Loans and the Stabilization Rewards applicable to Q L&B Immobilized Amounts from time to time.

(vii) The Q DeFi Expert Panel shall determine the technical and operational parameters in connection with each type of Eligible Collateral necessary to ensure consistency between the use of such Eligible Collateral on the Q Blockchain (including, without limitation, within Q DeFi) and on the original blockchain on which such type of Eligible Collateral is tokenized.

(viii) The Q DeFi Expert Panel shall determine the QSTC Surplus Threshold applicable from time to time.

2. The Q Fees & Incentives Expert Panel shall be responsible for taking certain decisions regarding fees and incentives within Q. In particular:

(a) The Q Fees & Incentives Expert Panel shall consist of up to the Maximum Number of Experts.

(b) The competence of the Q Fees & Incentives Expert Panel shall be as follows:

(i) The Q Fees & Incentives Expert Panel shall determine the rate(s) at which Validator Nodes may charge transaction fees in accordance with Appendix 3 (*Transaction Fees*).

(ii) The Q Fees & Incentives Expert Panel shall determine the System Reserve Share in connection with any Q Tokens to be allocated or redistributed to the groups of existing Q Stakeholders (other than Q Nodes) in accordance with Part A (*Constitutional Parameters*) above and the circumstances in which the corresponding reserve of Q Tokens within Q may be used for technical and/or operational purposes within Q.

(iii) In circumstances where it is not reasonably practicable that Q Tokens be allocated or redistributed to Q Stakeholders (other than Q Nodes) in accordance with any ratio specified in Part A (*Constitutional Parameters*) above, the Q Fees & Incentives Panel shall determine an alternative basis for such allocation or redistribution, having regard for such ratio.

(iv) The Q Fees & Incentives Expert Panels shall set the process in accordance with which Q Stakeholder (other than Q Nodes) shall claim the Q Tokens allocated or redistributed to them from time to time in accordance with this Appendix 6 (*Technical Parameters*), including all technical parameters.

(v) The Q Fees & Incentives Panels shall determine from time to time the price source to be used for the purposes of determining the rate at which QSTC shall be converted into Q Tokens.

3. The Root Node Selection Expert Panel shall be responsible for determining whether any Root Node Candidate is an Eligible Root Node Candidate. In particular:

(a) The Root Node Selection Expert Panel shall consist of up to the Maximum Number of Experts.

(b) The competence of the Root Node Selection Expert Panel shall be to determine whether a Root Node Candidate satisfies the eligibility criteria set out in Part B (*Eligibility Criteria*) of Appendix 2 (*Root Nodes Selection*).

APPENDIX 7
GUIDELINES FOR SLASHING

PART A – SLASHING OF Q TOKENS STAKED TO VALIDATOR NODES

Severity of non-compliance	Description	Non-exhaustive List of Examples	Maximum percentage of Q Tokens Staked to Validator Node by the Q Token Holder(s) operating such Validator Node to be Slashed
Level 1	Light misbehavior	• Single downtime (<10 minutes) within one month	0.1%
Level 2	Medium misbehavior	• Repeated downtime • Double signing of transactions • Initiating or co-signing empty blocks (without including Valid Transactions)	1.0%
Level 3	Severe misbehavior	• Prolonged downtime (>24 hours) • Breach of obligations set out in Article 4.3.1 (*Validator Nodes*)	10%
Level 4	Very severe misbehavior	• Blacklisting of transactions or addresses • Confirmation of transactions which are not Valid Transactions • Fraudulent transactions (e.g. signing double spend transactions) • Ignoring voting transactions which are Valid Transactions • Breach of obligations set out in Articles 4.3.2 or 4.3.3 (*Validator Nodes*)	100%

PART B – SLASHING OF Q TOKENS STAKED TO ROOT NODES

Severity of non-compliance	Description	Non-exhaustive List of Examples	Maximum percentage of Q Tokens Staked to Root Node to be Slashed
Level 1	Light misbehavior	• Single downtime (<10 minutes) within one month • Breach of obligations set out in Article 5.3.7 (*Root Nodes*)	0.1%
Level 2	Medium misbehavior	• Repeated downtime • Breach of obligations set out in Articles 5.3.1, 5.3.9 or 5.3.10 (*Root Nodes*)	1.0%
Level 3	Severe misbehavior	• Prolonged downtime (>24 hours) • Breach of obligations set out in Articles 5.3.2, 5.3.3, 5.3.8 (*Root Nodes*)	10%
Level 4	Very severe misbehavior	• Ignoring valid voting results • Breach of obligations set out in Articles 5.3.4, 5.3.5, 5.3.6, 5.3.11 or 5.3.12 (*Root Nodes*)	100%

APPENDIX 8
WITHDRAWAL OF STAKE PROCEDURE

1.   If, at any time, a Q Stakeholder operating a node on Q requests the withdrawal of any Q Tokens it has Staked to such node on Q, but, prior to the expiry of the relevant Q Token Time Lock Period, a Slashing Proposal is made in respect of some or all of the Q Tokens Staked to such node, then the Aggregate Staked Q Tokens, the Requested Release Q Tokens and the Proposed Slashing Q Tokens in respect of such Q Stakeholder, such withdrawal request and such Slashing Proposal shall be compared and:

   (i)   if the sum of the Requested Release Q Tokens and the Proposed Slashing Q Tokens is equal to or lower than the Aggregate Staked Q Tokens, a number of Q Tokens equal to the Requested Release Q Tokens shall be released from Stake upon the expiry of the Q Token Time Lock Period;

   (ii)   if the sum of the Requested Release Q Tokens and the Proposed Slashing Q Tokens is greater than the Aggregate Staked Q Tokens, then, subject to Paragraph 2:

      (A)   a number of Q Tokens equal to (I) the Aggregate Staked Q Tokens *minus* (II) the Proposed Slashing Q Tokens shall be released from Stake upon the expiry of the Q Token Time Lock Period;

      (B)   if the Voting Proposal is not accepted in accordance with Appendix 5 (*Voting*), a number of Q Tokens equal to (1) the Requested Release Q Tokens *minus* (2) the number of Q Tokens released from Stake pursuant to Paragraph (A) shall be released from Stake upon the later of (I) the expiry of the Q Token Time Lock Period and (II) the expiry of the Voting Period in respect of the Voting Proposal; and

      (C)   if the Voting Proposal is accepted in accordance with Appendix 5 (*Voting*), a number of Q Tokens equal to the Proposed Slashing Q Tokens shall be Slashed (the "**Relevant Slashed Q Tokens**").

2.   The procedure set out in Paragraph 1 shall apply separately in connection with each relevant Slashing Proposal made prior to the expiry of the relevant Q Token Time Lock Period. However, for the purposes of any calculations made in connection with each second and subsequent Slashing Proposals, the number of Aggregate Staked Q Tokens shall be reduced to take into account the aggregate Relevant Slashed Q Tokens determined under Paragraph 1 in connection with all previous Slashing Proposals. No Q Tokens shall be released from Stake until the Relevant Slashed Q Tokens (if any) in respect of the last Slashing Proposal made prior to the expiry of the relevant Q Token Time Lock Period have been calculated.