

1. OVERVIEW

DigixDAO was built for the community. It is a place where community members can gather together to support great ideas and also provide the means for individuals to contribute to the Digix ecosystem. We hope that through DigixDAO, Digix will eventually enable anyone in the world to hold any hard asset, whether gold or otherwise.

Why did we build DigixDAO?

We came across many problems arising from both the traditional and token industries which could be addressed through a decentralised decision-making organisation (DAO) - from the lack of a platform for great ideas to be shared and funded, to the opacity around the use of funds raised. We provide below just a few examples of issues we encountered during our time at Digix, which became the driving force behind the development of DigixDAO.

1. Where did my ETH go when I participated in an ICO?
2. When is product "XYZ" launching?
3. Who is the right person for the job?
5. I want to share this great idea but no one is paying me any attention.
6. I need some help on this great idea but who can I call to have it executed?
7. I want some feedback on this great idea but no one is giving them to me.
8. I want to support this other great idea but he is in a different country.
9. I need funds to make this great idea a reality but no one around me has the means to.

Vision, Mission and Principles

Our Vision: Enable those who believe in the democratization of hard assets like Gold in an increasingly digital and uncertain world to build the Digix ecosystem together.

Our Mission: Provide a sustainable platform for great ideas to grow the Digix ecosystem.

Guiding Principles: We would like to share 3 principles below that guided us in the design of DigixDAO. We would like to request for all who choose to participate in DigixDAO to take on these guiding principles to ensure that DigixDAO will be sustainable for the long term.

1. Transparency

We built DigixDAO to be a transparent platform where community members can gather to contribute to the Digix ecosystem. The smart contracts for DigixDAO are publicly available on the Ethereum blockchain, with their source codes publicly verifiable in our [repository](#). All [Projects](#) created in DigixDAO are also publicly available for comments and votes. Even after a Project has been completed, it will still be available for [Participants](#) to view and comment. Transparency is also one of the reasons for writing this guide, as we wanted to let all DGD token holders know exactly how DigixDAO works before they decide to participate.

2. Accountability

We believe that accountability is of utmost importance, especially when dealing with any form of funding. As DigixDAO is meant to be a platform for grants to be provided to community members, how the funds from DigixDAO are released and used would directly affect the sustainability of DigixDAO. Accountability was the main reason for implementing voting rounds at every Milestone and also for [Proposers](#) to provide [KYC Information](#).

3. Equitable

DigixDAO was built to be equitable, which was the core idea behind the design of the rewards system. Individuals who actively participate and contribute to DigixDAO will be rewarded more than those who are inactive. [Moderators](#), for contributing more to DigixDAO, would receive additional rewards are not available to Participants. Also, those who participate longer in DigixDAO will generally receive higher rewards than an individual which just started his or her participation in DigixDAO. Equitable is not the same as equal and we believe that those who contribute more should deserve a greater reward.

DGD Tokens and their Utility

DGD tokens gives token holders the ability to moderate, approve, reject, comment on projects on the DigixDAO governance platform. It provides DGD holders the ability to generate and implement great ideas for the growth of the Digix ecosystem. There are only ever 2,000,000 DGD tokens created.

Anyone who chooses to exercise these abilities on the DigixDAO governance platform would be rewarded in the form of DGX gold tokens for helping to grow the Digix ecosystem.

Participation is Voluntary

All DGD tokens are transferable when they are not locked in the DigixDAO platform. The DigixDAO platform is a freely voluntary and participatory platform for ideas to turn into reality. One can choose to exit the DigixDAO governance platform at will / choose not to be in the community with an explicit freedom of choice.

2. ROLES

Before diving into the details of DigixDAO, we thought it would be useful to have a brief introduction to the 6 roles in DigixDAO - [Participant](#), [Proposer](#), [Moderator](#), [Founder](#), [PRL](#) and [KYC Admin](#). Keep in mind that the roles in DigixDAO are not mutually exclusive. For example, assuming all qualifications are met, a person can act as a Participant, Proposer and Moderator at the same time.

Participant

Participants form the majority of the roles in DigixDAO and are its main decision-making body. To be a Participant, a DGD holder has to lock the minimum number of DGDs to participate in a particular [Quarter](#) of DigixDAO. For the launch of DigixDAO, the minimum number of DGDs to participate is 10 DGDs.

Participants are the gatekeepers of DigixDAO - all [Milestone Funding](#) granted from DigixDAO requires approval from Participants. Participants are also able to comment on a [Project](#) at any point in time and can also vote for subsequent funding to be released from DigixDAO after each Milestone is completed. At the end of a Project, Participants can also vote on whether the [Collateral](#) and [Final Reward](#) of that Project should be granted to a Proposer.

Proposer

Proposers are Participants who create Projects on DigixDAO. To qualify as a Proposer, a Participant has to provide his or her relevant [KYC Information](#) which has to be vetted and approved by the KYC Admin. As funding can only be granted by DigixDAO through Projects, KYC acts as a filter to prevent bad actors from requesting funding from DigixDAO.

Proposers are the core of DigixDAO - without Proposers and their Projects, Moderators and Participants have nothing to contribute to DigixDAO. For the launch of DigixDAO, the maximum funding that a Project created by a Proposer can request from DigixDAO is 300 ETH. During the lifetime of a Project, a Proposer is able to:

- Create a Project;
- Modify a Project;
- Claim Milestone Funding;
- Deliver the Milestones of a Project; and
- Claim the Final Reward.

In DigixDAO, a Proposer can simultaneously act as a Participant and/or Moderator, meaning a Proposer can endorse their own Projects as a Moderator at the [Idea](#) stage and vote for their own Projects as Participants or Moderators during the various [stages](#) of their Project.

Moderator

Moderators are Participants who are able, at any time in a given Quarter, to:

- (i) lock the minimum DGDs required to moderate, which was decided to be 842 DGDs in [Carbon Vote 1](#); and
- (ii) accumulate the minimum [Reputation Points](#) required to moderate, which is 400 Reputation Points for the launch of DigixDAO.

Any Participant who has enough DGDs and Reputation Points will immediately qualify as a Moderator. Keep in mind that all Moderators are also Participants in DigixDAO. Any Participant with a [DGD Badge](#) is able to redeem 412.5 Reputation Points, which grants them enough Reputation Points needed to qualify as a Moderator at the launch of DigixDAO.

Moderators are able to screen all Projects before they can be voted on by Participants. When a Project is at the Idea stage, a Project would require a Moderator's [Endorsement](#) before it can progress to the [Draft](#) stage. When a Project is at the Draft stage, only Moderators are allowed to vote on a Project to determine whether it can move to the [Proposal](#) stage.

Founder

We, as Digix, will primarily participate in DigixDAO as Founders. A Founder's role in DigixDAO is to provide supervision of DigixDAO as well as to carry out [Special Projects](#). Apart from Special Projects, a Founder can:

- After the end of each Quarter, initiate the start of each new Quarter in DigixDAO;
- Create a Project which requests funding exceeding the maximum funding limit; and

- Close inactive Projects which have been in the Draft stage for more than 90 days.

The addresses that we have allocated as Founders are:

- 0x0C2b310ba4785aA4e50d03D0AC90017816b8de5
- 0x184c11eC09c45F126C43E270Ade03b3a5a4188B0
- 0xe9781846340570c9d59b81F304AF11B36FCD0de6
- 0xc35BF182CdfC77e52eF993eCA064E5b6c283cE33

Policy, Regulatory and Legal Department (PRL)

The PRL's role is to pause or stop funding for any Project at any point in time due to policy, regulatory or legal concerns. Such concerns could be that a Project:

- Goes against the [Vision, Mission or Guiding Principles](#) of DigixDAO;
- Is contrary to the Terms of DigixDAO, including our Anti Money-Laundering Policy; and/or
- We know or suspect any other legal or regulatory concerns which may arise from a Project.

The addresses that we have allocated as PRL are:

- 0x4a84CeFe63E320208aEc7742a8FF2151F96449a4
- 0x9c65F1AbeD998AdDA058D08418C05Bd57c51ec6D
- 0x8fAc72EE17c6F4D22EC670A51cC87F3F4c3573f8

Know-Your-Client Administrator (KYC Admin)

We currently only require Proposers to provide KYC Information. Accordingly, the KYC Admin's role is to process and manage the KYC Information we receive from Proposers. We require Proposers to provide KYC Information in order to administer an initial check on the legitimacy of the Proposers, as well as to impose some accountability on Participants who want to create a Project.

The address that we have allocated as KYC Admin is:

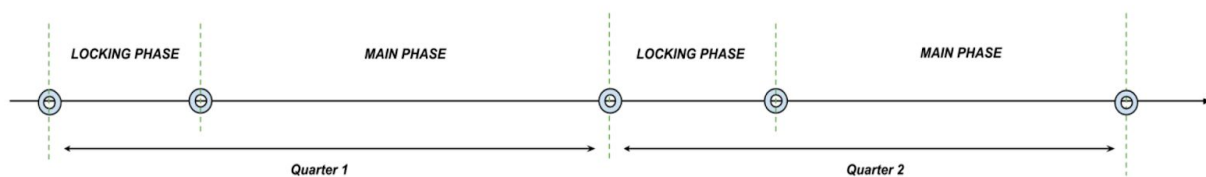
- 0xe2dBfC7eDba347fC117BbDFA1966B0B94Eb16639

3. SETUP

This section describes everything you need to participate in DigixDAO. To properly prepare yourself, some important information to note from this section will be:

- The optimal time to lock your DGDs; and
- How to become a [Moderator](#)

DigixDAO Timeline



DigixDAO works in Quarters, with each Quarter lasting exactly 90 days - from the start of Day 1 to the end of Day 90. Each Quarter consists of 2 phases, a Locking Phase (start of Day 1 to the end of Day 10) and a Main Phase (start of Day 11 to the end of Day 90). Locking Phases are meant to provide you sufficient time to decide on the amount of DGDs to lock in a given Quarter and Main Phases are when all governance activities take place.

If you decide not to participate for any reason, you may unlock DGDs at anytime during the Locking Phase (start of Day 1 to Day 10). **Please note that failure to do so after Day 10 would mean that whatever DGDs that are locked stays within DigixDAO until the end of the Quarter.**

We, as [Founders](#), are responsible for initiating the start of each Quarter. As far as possible, we intend to automate the process of initiating the start of each Quarter to minimise any delays.

Locking DGDs for Stake

Stake is the amount of voting power a Participant gets from locking his or her DGDs. Stake is used for voting on Projects and is also the primary factor determining the portion of DGX rewards the [Participant](#) can claim. In exchange for locking DGDs, you will receive Stake which will be used to vote on Projects during the [Main Phase](#) of a Quarter. The more DGDs you lock, the more Stake you receive.

To participate in DigixDAO, you have to lock **at least 10 DGDs** to be considered a Participant. Although locking less than 10 DGDs is possible on the smart contracts, you will not be

considered a Participant if you lock less than 10 DGDs. **If you lock any DGDs during a Main Phase, please note that you are required to lock more than 10 DGDs or 842 DGDs to be considered a Participant or Moderator, respectively.** Although it is possible to lock DGDs at any time during a Quarter, the general rule is that for the same number of DGDs, the later they are locked, the less Stake you receive. This general rule is created to recognise the loss of liquidity of other Participants who locked DGDs earlier in a Quarter.

We encourage you to lock your DGDs during a [Locking Phase](#) (when there are no penalties on Stake) and lock DGDs during a Main Phase (when comparatively less Stake will be allocated) **only when absolutely necessary**. Once your DGDs are locked and the Locking Phase is over, you can only unlock your DGDs during the Locking Phase of the next Quarter.

Stake Calculation

During a Locking Phase, you will receive 1 [Stake](#) for every DGD you lock. DGDs can be locked at any time during a Quarter, but can only be unlocked during a Locking Phase.

During a Main Phase, your Stake for the Quarter will be determined according to the formula below:

$$\text{Total Stake} = \text{Current Stake} + (\text{Additional Locked DGDs} \times \frac{90 - \text{Days Passed in a Quarter}}{80})$$

Where:

- *Total Stake* is your total Stake after adding the Stake you receive from locking DGDs during the Main Phase
- *Current Stake* is your Stake before locking DGDs during the Main Phase
- *Additional Locked DGDs* is the number of DGDs you locked during the Main Phase
- *Days Passed in a Quarter* is the number of days that have passed in the current Quarter

Applying the formula and assuming:

- You want a total Stake of 200 for the Quarter;
- Your Current Stake is 100 for locking 100 DGDs during the Locking Phase; and
- It is currently Day 50 of a Quarter

You will need to lock an additional 200 DGDs by the end of Day 50 to achieve a total Stake of 200 for the Quarter.

Whether as a Moderator or Participant, you will use your Stake to vote on Projects. When you decide to vote on a Project, the vote's weight is equal to all of your Stake. As a Moderator, you can use your Stake to vote on Projects during the [Draft](#) stage. As a Participant, you can use your Stake during all other stages of a Project, which includes both the [Proposal](#) and [Review](#) stages. You can vote on as many Projects as possible at any one time. Voting on a Project does not affect your votes on other Projects in any way.

Redeeming DGD Badges

DGD Badges were given out to our biggest supporters as a token of appreciation during our Token Generation Event in 2016. If you have a DGD Badge and redeem it, you will receive 412.5 [Reputation Points](#), which would be more than enough Reputation Points to qualify as a Moderator at the launch of DigixDAO.

Remember that Reputation Points are different from [Stake](#) - Reputation Points are used to measure your participation in DigixDAO over time and Stake is used to vote on Projects in a particular Quarter. Reputation Points can be gained or lost depending on your participation in DigixDAO but Stake will never decrease and is dependant on the amount and time at which you lock DGDs during a Quarter.

Although it is possible for one address to hold multiple DGD Badges, we allow only 1 DGD Badge to be redeemed for each address participating in DigixDAO. This prevents a single address from collecting a large amount of Reputation Points such that it will remain a Moderator for an extended period of time without active participation in DigixDAO. If you have more than 1 DGD Badge, you are free to transfer your extra DGD Badges to other addresses.

Reputation Points exist to move DigixDAO away from a form of moneycracy to an epistocracy, where users who are most vested, knowledgeable, and working for the best intentions for DigixDAO are given a stronger voice in the direction of DigixDAO.

Gas Requirements for Participation

The launch version of DigixDAO is built on the Ethereum blockchain. Some of the actions in DigixDAO that require Gas to complete are:

- [Locking DGDs for Stake](#);
- [Voting](#) on Projects;
- [Creating](#) a Project;
- [Claiming DGX rewards](#); and

- [Unlocking DGDs](#).

Participation Over Multiple Quarters

After the end of a Quarter, you are able to withdraw your locked DGDs during the Locking Phase of the subsequent Quarter. If you do not want to withdraw your DGDs, you can keep them locked in DigixDAO to continue your participation in the subsequent Quarter. However, you are still required to confirm your participation in the new Quarter before any Stake is allocated to you.

Keep in mind that due to the penalty in Stake when locking DGDs during a Main Phase, you should confirm your participation in the new Quarter during a Locking Phase to receive the maximum possible Stake for your DGDs.

Setting Profile Details

After locking enough DGDs to participate in DigixDAO, you are able to set your username and email, which will be linked to your address in DigixDAO. Your username will be displayed to other Participants if you create a Project or comment on one. Please choose your username carefully as they can only be provided **once**. We do not allow multiple changes to usernames as [Quarter Points](#) and Reputation Points are tagged to your identity, whether it is your address or username. Allowing multiple changes would enable an individual to amend their identity after acting inappropriately. Of course, you can always choose to use the default username assigned to you while you decide on your username. Providing an email is only compulsory if you want to [submit KYC to be a Proposer](#). As we will primarily communicate with you through email, we highly encourage you to provide an email address.

4. PROJECTS

There are 2 types of Projects that can be created in DigixDAO, which are Projects and [Special Projects](#). Projects are used to request funding from DigixDAO and Special Projects are used to change configuration parameters of DigixDAO. There are 6 possible stages of a Project, which are: [Idea](#), [Draft](#), [Proposal](#), [Ongoing](#), [Review](#) and [Archived](#). This section focuses on the lifecycle of a Project, from the requirements to create a Project at the Idea stage to the end of a Project when it is Archived.

KYC Mandatory for Proposers

To be a [Proposer](#), you are required to submit certain KYC Information to the KYC Admin. Only KYC-approved Proposers can create Projects on DigixDAO.

The KYC Information that you are required to submit includes your:

- Full name;

- Date of birth;
- Form of identification, which can be your passport or national identity card;
- Country of residence; and
- Nationality.

After your KYC Information is vetted and approved, you will qualify as a Proposer and can now create Projects on DigixDAO.

Projects

As a Proposer, the Maximum Funding you can request from DigixDAO through a Project is 300 ETH. Also, the maximum number of Projects per Quarter will be 80 Projects at the launch of DigixDAO.

Digix Projects

Digix Projects are also Projects which also request funding from DigixDAO, but are created by a Founder address. The only difference between Projects and Digix Projects are that a Digix Project is able to request more than 300 ETH from DigixDAO. Regardless, all Digix Projects will have to be approved by through the votes of [Moderators](#) and [Participants](#) before any funds are granted.

Special Projects

Special projects are only meant to change configuration values of DigixDAO and are not able to request any funding from DigixDAO. Special Projects can only be created by Founder addresses and do not require collateral to be created. Once created, all Special Projects can go straight to [Participant voting](#).

Special Projects are necessary as the parameters in DigixDAO at launch may require adjustments due to certain factors after the launch, such as the actual level of participation in DigixDAO and the number of Projects that successfully receive funding from DigixDAO. One example could be that, it may no longer be realistic to require a [Collateral](#) of 2 ETH per Project if the value of ETH reaches an exorbitant amount.

Collateral

Before creating any Project, you need to stake a Collateral of 2 ETH before it is successfully created. We included Collaterals to minimise the creation of spam Projects and also to discourage Proposers from abandoning a Project midway. Similar to other configurations of

DigixDAO, the amount of Collateral required to create a Project can be adjusted through a Special Project.

Once your Project is created, your Collateral can only be returned when:

1. You terminate your Project before finalising it at the Draft stage;
2. Your Project does not get through Moderator voting at the Draft stage;
3. Your Project does not get through Participant voting at the Proposal stage; or
4. You deliver all Milestones in your Project and Participants approve to return your Collateral at the final Review stage.

Essentially, once you receive any funding for your Project, you can only get back your Collateral after you complete all the [Milestones](#) of your Project. All Collateral that is not returned to Proposers will be sent to DigixDAO.

Final Reward

In contrast with Collateral which can be seen as a penalty for abandoning a Project midway, the Final Reward is your incentive to fully complete your Project. At the final Review stage, Participants will vote on whether you should receive both your Collateral and [Final Reward](#). Although you are free to set your own Final Reward, it would be best to keep your Final Reward to a reasonable amount as Participants may vote to reject it.

Creating a Project

To create a Project, you are required to provide the following details:

- The title of your Project;
- A short description on your Project;
- Detailed information about your Project;
- Images to supplement the description and information about your Project;
- The number of Milestones required to complete your Project;
- Funding required for each Milestone of your Project;
- A description of what you intend to deliver at each Milestone of your Project; and

- Your Final Reward after you fully complete your Project.

Moderators and Participants will use the information you provide to determine the feasibility of your Project. With this in mind, it is always best to display information which will boost your credibility and also your ability to complete your Project.

Project Stages

All Projects start as an Idea and end when Archived. At any stage of a Project, all Participants in DigixDAO can comment on it.

Assuming you are a Proposer and have successfully created a Project:

1. Idea

Your Project is at the Idea stage right after you have successfully created it. You are able to edit your Project at this stage in response to feedback or refine the details of your Project. To move your Project to the Draft stage, your Project has to receive an [Endorsement](#) from a Moderator in DigixDAO. The Endorsement can come from any Moderator, including yourself. Your Collateral is refunded if you terminate your Project at this stage.

2. Draft

At the Draft stage, you have the final chance to edit your Project. Once you feel confident about the details of your Project, you can proceed to finalise your Project to allow Moderators to vote on it. After you finalise your Project, **you can no longer edit the existing content of your Project**. Note that you only have **90 days** from the start of the Idea stage to finalise your Project. If not, your Project will be considered inactive and finalisation is no longer possible.

Once finalised, Moderators will be able to vote on your Project for the next 10 days. To move your Project to the Proposal stage, your Project has to be approved by Moderators through a majority vote. All Moderators can vote at the Draft stage, including yourself. Your Collateral is refunded if it is rejected during the Moderator vote.

3. Proposal

At the Proposal stage, all Participants, including the Moderators and yourself, can vote on your Project for the next 15 days. The Proposal stage is crucial as this is the stage which determines whether funds are granted by DigixDAO. To move your Project to the Ongoing stage, your Project would require a majority vote by Participants. If your Project

receives the majority vote, DigixDAO will grant you the funding you requested to deliver your first Milestone. Your Collateral is refunded if it does not pass the Participant vote.

4. Ongoing

At the Ongoing stage, you are able to use the funding received from DigixDAO to deliver the current Milestone of your Project. At this stage, you can add further supporting documents to your Project to show your progress in the current Milestone. After completing a Milestone, you can mark your Milestone as “completed” and move your Project to the Review stage for a Participant vote.

5. Review

At the Review stage, Participants will vote on whether your current Milestone is delivered as promised. Similar to voting at the Proposal stage, your Project will have to receive a majority vote by Participants. At this stage, Participants will have 14 days to vote on your Project. If your Project is approved by the Participant vote, you will receive additional funds to deliver your next Milestone and your Project will move to the next Ongoing stage.

In short, the Project will move between the Ongoing and Review stages until you deliver the final Milestone of your Project. After you fully deliver all your Milestones, Participants will vote on whether you receive your Collateral and Final Reward at the final Review stage.

6. Archived

At the Archived stage, your Project is either fully completed or it failed to receive a majority vote at any voting phase. At this stage, although you can no longer act on your Project, Participants will still be able to comment on it.

Milestones

Milestones are meant for you to demonstrate the current progress on your Project. You can mark a Milestone as “completed” at any time your Project is at the Ongoing stage. At the Ongoing stage, you are also able to increase the number of Milestones in your Project and also amend the funding you initially requested for the subsequent Milestones. For the launch of DigixDAO, each Project can have a minimum of 1 Milestone and a maximum of 5 Milestones.

Keep in mind that Proposers may request a large amount of funds for a Project that contains only one Milestone and thereafter abandon their Project without doing any work. For example,

assuming a Proposer requests for the maximum amount of 300 ETH for a Project and the breakdown of his Milestone funding is as follows:

- First Milestone: 290 ETH
- Final Reward: 10 ETH

Moderators and Participants should be wary of this Proposer as there is a strong likelihood that the Proposer could abandon his Project after receiving the 290 ETH. As there is no easy way to prevent this situation, we would depend on the comments and votes of Moderators and Participants to mitigate this situation.

An example of a sensible funding schedule of a Project with 2 Milestones could be as follows:

- First Milestone: 50 ETH
- Second Milestone: 100 ETH
- Final Reward: 150 ETH

With this funding schedule, Participants are able to review the work completed by the Proposer at the Review stage before granting additional funds to the Proposer.

Claiming Voting Results

As a Proposer, you are able to view the results of the voting round after each voting period has passed. However, you will have to manually claim your voting results to mark the end of the voting round. You have a deadline of 7 days to claim your voting results and is necessary for both Moderator voting and Participant voting. **Claiming voting results is crucial for a Proposer - if you do not do so, your Project would be deemed as rejected even if it received a majority vote.**

PRL Intervention

Where the PRL finds that your Project goes against the [Vision, Mission and Guiding Principles](#) of DigixDAO, is contrary to the Terms of DigixDAO or may raise any other legal and regulatory concerns, the PRL is able to mark your Project as illegal or invalid and stop any further funding for the Project.

5. VOTING

Voting underpins every decision in DigixDAO and was designed for a single purpose - to decide whether funds should be released to a [Proposer](#). Before any funds are released, a [Project](#) has to be [Endorsed](#) by a Moderator, pass the [Moderator voting](#) round at the [Draft](#) stage and

thereafter pass the [Participant voting](#) round at the [Proposal](#) stage. This section will introduce the mechanics of Endorsements, Moderator and Participant voting and the [Quorum](#) and [Approval Threshold](#) requirements for Projects and [Special Projects](#).

Moderator Endorsement

Before any Project can be voted on, it has to first be Endorsed by a Moderator at the [Idea](#) stage. Although Endorsement should be relatively easy to achieve, the purpose of Endorsement is to allow Moderators to filter out any Projects which might be considered unfit for DigixDAO.

Moderator Voting

During the Draft stage, Moderators are given 10 days to vote after it is finalised by a Proposer. Moderators are allowed to vote either “yes” or “no” on a Project. Results of Moderator votes are updated immediately and can be viewed by all Participants. Moderators are able to change their vote at any time during the 10-day period. Provided that the relevant Quorum and Approval Threshold requirements are met, the Project will move to the Proposal stage for Participant voting.

Participant Voting: Commit-Reveal

After a Project is approved by Moderators at the Draft stage, the remaining voting phases are open to all Participants to cast their vote. Participants will first be able to vote on a Project at the Proposal stage, and also thereafter at the relevant Review stages of a Project. Contrary to Moderator voting, Participant voting is done through a 2-stage Commit-Reveal process.

The table below compares the voting periods for Participant voting at the Proposal and Review stages:

Voting Period	Project	Special Project
Commit Phase Duration (Proposal)	10 Days	14 Days
Reveal Phase Duration (Proposal)	5 Days	7 Days
Commit Phase Duration (Review)	7 Days	7 Days
Reveal Phase Duration (Review)	7 Days	7 Days

The Commit-Reveal duration is longer for a [Special Project](#) (to change the configurations of DigixDAO) compared to a Project (to request for funding) to allow Participants more time to cast their votes. After a Projects is approved at the Proposal stage, the duration for Commit-Reveal is shorter at the Review stage as it takes less time for Participants to verify whether a [Milestone](#) has been delivered by the Proposer.

As a Participant at the Commit phase, you are able to commit your vote with either a “yes” or “no”. While committing your vote, you will be asked to download a commit file which represents your committed vote. At the Commit phase, you are able to change your vote at any time by downloading a new commit file. As the new commit file invalidates all your previous commit files, you will only be able to reveal your most recent committed vote at the Reveal phase.

At the Reveal phase, you can only reveal your committed vote by providing your latest commit file. As only votes which are successfully revealed are counted, we advise you to keep track of the Projects which you have initially committed your vote.

Quorum

Quorum is the minimum Stake a Project must receive for a particular voting round to be valid. If the Quorum requirement is not met, the Project will not pass a voting round even if a majority vote is achieved. Quorum is necessary for all voting rounds of any Project and is applicable for both Moderator and Participant voting. As the amount of ETH requested increases, the Quorum for the minimum [Stake](#) also increases in a linear manner.

The Quorum required for each voting round is determined by the formula below:

$$\text{Quorum Required} = \text{Total Stake in Quarter} \times (x\% + \frac{\text{ETH requested by Project}}{\text{ETH currently in DigixDAO}} \times \text{Scaling Factor})$$

Where:

- *Total Stake in Quarter* is the total value of all the Stake in DigixDAO for a particular Quarter.
- *x%* is the minimum % of Stake that is required even if 0 ETH is requested. We have set this value to 5% for the launch of DigixDAO.
- *ETH requested by Project* is the amount of ETH a Project is requesting from DigixDAO. During Moderator Voting at the Draft stage, this value would be the total amount of ETH that is requested by the Project for the first Milestone. During Participant Voting at the Proposal and Review stages, this value would be the amount of ETH requested to fund the delivery of the next Milestone.
- *ETH currently in DigixDAO* is the amount of ETH currently available for funding Projects in DigixDAO, which is 20,000 ETH at the launch of DigixDAO.
- *Scaling Factor* is necessary to reflect the different levels of Quorum requirements of (i) Moderator voting at the Draft stage, (ii) Participant voting at the Proposal stage and

intermediary Review stages and (iii) Participant voting at the final Review stage. For the launch of DigixDAO, the scaling factor is set at 0.35, 0.25 and 0.07 for (i), (ii) and (iii) respectively. The value of the scaling factor for (i) is higher than (ii) and (iii) as Moderators should be more active in participation as compared to Participants. The value of (ii) is higher than (iii) because the voting at the final Review stage does not release further Milestone funding, which should warrant a lower quorum requirement.

Applying the Quorum formula to a Project put up for Participant Voting during the Proposal stage and assuming:

- *Total Staked DGD in Quarter* is 1,000,000 DGDs
- *x%* is 5%
- *ETH requested by Project* is 20 ETH to deliver the first Milestone
- *ETH currently in DigixDAO* is 20,000 ETH
- *Scaling Factor* is 0.25

The Quorum required for the Participant voting round to be valid would be 50,250 Stake.

Approval Threshold

Where [Quorum](#) deals with the validity of a voting round, the Approval Threshold considers whether that voting round has been approved based on the % of the total number of votes that have been successfully cast. For all voting rounds, Projects require an Approval Threshold of more than 50%, which translates to a simple majority vote from all eligible voters in a given voting round.

Taking the assumptions in the Project example above, assuming that a total of 50,250 Stake was successfully cast, the Project would require an approval threshold of more than 25,125 Stake to be approved by Participants.

Predictive Voting Incentive

To incentivise careful consideration when voting on Projects, Participants receive a small amount of bonus [Reputation Points](#) if the result of the subsequent voting round matches their vote in the current voting round. Reputation Points are considered when determining the amount of DGX a Participant can claim as rewards at the end of a Quarter. Taking a Participant's vote during the Proposal stage as an example:

Participant's Vote during Proposal Stage	Proposal Stage Result	First Review Stage Result	"Predictive Voting" Incentive
Yes	Yes	Yes	Yes
No	Yes	No	Yes
Yes	Yes	No	No
No	No	Not Applicable	No

If eligible, the bonus Reputation Points that a Participant will receive is determined by the formula below, which considers the correctly predicted result as an imaginary vote solely for the purposes of calculating the bonus Reputation Points:

$$\text{Bonus Reputation Points} = \text{Quarter Points earned from imaginary vote} \times \text{Reputation Points earned per Quarter Point} \times p\%$$

where:

- *Bonus Reputation Points* is the bonus Reputation Points a Participant would receive for correctly predicting the result in the subsequent voting round
- *Quarter Points earned from imaginary vote* is the Quarter Points that would have been awarded to the Participant had the imaginary vote been considered as an actual vote
- *Reputation Points earned per Quarter Point* is used to convert the value of Quarter Points to Reputation Points as the Predictive Voting Incentive is distributed in terms of Reputation Points. The Predictive Voting Incentive is not suitable for distribution as Quarter Points because Quarter Points are meant to measure active participation in DigixDAO. Considering the nature of Predictive Voting Incentive, no action was taken by the Participant to earn the incentive
- *p%* is necessary to scale down the amount of bonus Reputation Points received from Predictive Voting. Scaling is necessary as in fact, no action was taken by the Participant to earn the bonus Reputation Points. Hence, the weight of each bonus Reputation Point received from Predictive Voting should not be the same as each [Quarter Point](#) earned by a Participant for casting a real vote. For the launch of DigixDAO, a value of 15% was set for *p%*

Applying the Predictive Voting Incentive formula for the configuration values that are set for the launch of DigixDAO:

- *Quarter Points earned from imaginary vote* is 1
- *Reputation Points earned from imaginary vote* is 1
- *p%* is 15%

a Participant would earn a bonus of 0.15 Reputation Points for each instance where the result of the subsequent voting round matches his vote in the current voting round.

6. REWARDS

Rewards are meant to encourage participation in DigixDAO. The more you participate in DigixDAO, the more rewards you can claim at the end of each [Quarter](#). To determine the amount of DGX you can claim, DigixDAO considers (i) your [Stake](#), (ii) your [Quarter Points](#) and [Reputation Points](#) at the end of the Quarter and (iii) whether you have participated in DigixDAO as a [Moderator](#). For each Quarter, the rewards are sourced from the [DGX transfer fees and demurrage fees](#) which have been collected up till the end of the particular Quarter. In this section, we will describe how to earn Quarter Points and Reputation Points, the [different reward pools](#) for Moderators and Participants and how your DGX rewards are calculated.

Quarter Points

As a Participant, Quarter Points are a direct measure of your participation in a given Quarter. At the end of a Quarter in DigixDAO, your Quarter Points will count towards the amount of DGX you can claim for your participation. Your Quarter Points start from 0 at the beginning of each Quarter and are accumulated over the Quarter through voting on Projects.

Each vote you successfully cast will earn you 1 Quarter Point. There will be no Quarter Points earned from receiving funding from DigixDAO.

For example, assuming that you successfully cast 10 votes in the Quarter (which earned you 10 Quarter Points) you would have accumulated a total of 10 Quarter Points over the Quarter. All your excess Quarter Points after fulfilling the minimum Quarter Point threshold (set at 2) will be converted to Reputation Points on a 1:5 basis at the end of the Quarter and will be reset to 0 for the start of the next Quarter.

Moderator Quarter Points

In DigixDAO, Moderators can earn Moderator Quarter Points through voting for Projects at the [Draft](#) stage. As a Moderator, you will receive 1 Moderator Quarter Point for each Moderator vote you cast at the Draft stage of a Project. Excess Moderator Quarter Points after fulfilling the minimum Moderator Quarter Point threshold (set at 4) will also be converted to Reputation

Points on a 1:1 basis at the end of the Quarter and will also be reset to 0 for the start of the next Quarter.

As a Moderator, your Moderator Quarter Points are accumulated separately from your Quarter Points. In terms of rewards, only your Moderator Quarter Points will be considered when determining the DGX rewards you can claim from the [Moderator Rewards pool](#), can only use your Moderator Quarter Points to determine DGX rewards you can claim from the Moderator Rewards pool, which also means Moderator Quarter Points are not considered when claiming rewards from the [Participant Rewards pool](#).

For example, assuming you successfully cast 10 Moderator votes (which earned you 10 Moderator Quarter Points) and 20 Participant votes (which earned you 20 Quarter Points), which would be used separately to calculate your DGX rewards from the Moderator Rewards pool and the Participant Rewards pool respectively.

Reputation Points

In contrast with Quarter Points which are a specific measure of your participation over a given Quarter, Reputation Points are a cumulative measure of your participation in DigixDAO over all Quarters. Where Quarter Points can only be gained, Reputation Points can be gained or lost depending on your participation over the existence of DigixDAO.

Reputation Points are earned through:

- The conversion of Quarter Points and Moderator Quarter Points (if any) at the end of each Quarter;
- The [Predictive Voting Incentive](#);
- By [redeeming a DGD badge](#); and
- If you voted in Carbon Vote [1](#) and/or [2](#).

However, Reputation Points are lost if:

- You do not participate in a Quarter;
- As a Participant, you accumulated less than the minimum Quarter Point threshold over a Quarter, which we have set as 2 Quarter Points for Participants; and
- As a Moderator, you accumulated less than the minimum Moderator Quarter Point threshold over a Quarter, which we have set as 4 Moderator Quarter Points for Moderators.

The calculation of your Reputation Points is mutually exclusive for Participants and Moderators, meaning your Reputation Points will be determined separately if you are both a Participant and a Moderator. The calculation of Reputation Points will also differ if your Quarter Points (or Moderator Quarter Points) is below the minimum Quarter Point (or Moderator Quarter Point) threshold. A further penalty will be made if you do not lock sufficient DGDs to qualify as a Participant during the Quarter.

We provide two formulas below to calculate your Reputation Points as a Participant and a Moderator. If you are both a Participant and a Moderator, your Reputation Points will be determined by both formulas:

As a Participant

- if *Quarter Points* \geq *Minimum Quarter Point Threshold*, then :

$$\text{Reputation Points Change} = (\text{Quarter Points} - \text{Minimum Quarter Point Threshold}) \times \text{Reputation Points Earned per Quarter Point}$$

- if *Quarter Points* $<$ *Minimum Quarter Point Threshold*, then :

$$\text{Reputation Points Change} = - \frac{(\text{Minimum Quarter Point Threshold} - \text{Quarter Points})}{\text{Minimum Quarter Point Threshold}} \times (\text{Maximum Reputation Point Deduction})$$

- if less than 10 DGDs are locked in the Quarter, then :

$$\text{Reputation Points Change} = - \frac{(\text{Minimum Quarter Point Threshold} - \text{Quarter Points})}{\text{Minimum Quarter Point Threshold}} \times (\text{Maximum Reputation Point Deduction}) - \text{Extra Penalty for not Locking DGD}$$

Where:

- *Reputation Points Change* means the change to your current accumulated Reputation Points
- *Minimum Quarter Point Threshold* means a value of 2 as a Participant
- *Quarter Points* means the Quarter Points you accumulated over the Quarter
- *Maximum Reputation Point Deduction* is the penalty if you do not accumulate any Quarter Points in the Quarter, which we have set as 8.334 for Participants

- *Reputation Points Earned per Quarter Point* is the conversion ratio for Quarter Points to Reputation Points at the end of a Quarter, which is set to 5 Reputation Point per Quarter Point
- *Extra Penalty for not Locking DGD* is an extra penalty if you do not lock enough DGDs to qualify as a Participant in the current Quarter, which we have set as 1.666 for the launch of DigixDAO

Applying the formulas above and the initial configurations for DigixDAO launch, assuming:

- You are a Participant and not a Moderator
- You have 20 Reputation Points for voting during Carbon Votes [1](#) and [2](#)
- You earned 10 Quarter Points for voting in 10 [voting rounds](#)
- You locked 10 DGDs in DigixDAO in the current Quarter during the [Locking Phase](#)

You will end up with a net gain of 40 Reputation Points, which increases your Reputation Points from 20 to 60. Note that your Reputation Points will not go below 0 if your inactivity causes a net loss in Reputation Points.

As a Moderator

- *if Moderator Quarter Points \geq Minimum Moderator Quarter Point Threshold, then :*

$$\text{Reputation Points Change} = (\text{Moderator Quarter Points} - \text{Minimum Moderator Quarter Point Threshold}) \times \text{Reputation Points Earned per Moderator Quarter Point}$$

- *if Moderator Quarter Points $<$ Minimum Moderator Quarter Point Threshold, then :*

$$\text{Reputation Points Change} = - \frac{(\text{Minimum Moderator Quarter Point Threshold} - \text{Moderator Quarter Points})}{\text{Minimum Moderator Quarter Point Threshold}} \times (\text{Maximum Moderator Reputation Point Deduction})$$

where:

- *Reputation Points Change* means the change to your current accumulated Reputation Points
- *Minimum Moderator Quarter Point Threshold* means a value of 4 as a Moderator

- *Moderator Quarter Points* means the Moderator Quarter Points you accumulated over the Quarter
- *Maximum Moderator Reputation Point Deduction* is the penalty if you do not accumulate any Moderator Quarter Points in the Quarter, which we have set as 12.5 for Moderators. This value is higher for Moderators as we expect Moderators actively contribute to DigixDAO
- *Reputation Points Earned per Moderator Quarter Point* is the conversion ratio for Moderator Quarter Points to Reputation Points at the end of a Quarter, which is set to 1 Reputation Point per Moderator Quarter Point

Applying the formula above and taking the configurations of DigixDAO at launch, assuming:

- You are both a Moderator and a Participant
- You have 412.5 Reputation Points going into the current Quarter, which is the Reputation Points you gained from redeeming a DGD badge
- You locked at least 842 DGDs in the current Quarter during the Locking Phase, which is the minimum required for a Moderator
- You have 0 Moderator Quarter Points as you did not participate in Moderator voting during the Quarter
- You earned 10 Quarter Points for voting in 10 voting rounds as a Participant

You will end up with a net gain 28.5 Reputation Points (gain of 40 as a Participant but loss of 12.5 as a Moderator), which increases your Reputation Points from 412.5 to 441.

Reputation Points for Carbon Votes 1 and 2

In 2018, we conducted Carbon Votes [1](#) and [2](#) over August and September to decide:

1. The percentage of the total rewards that is allocated to the Moderator rewards pool for each Quarter.
2. The minimum amount of DGDs locked to be considered a Moderator.
3. Whether US\$20,000,000 worth of ETH could be released to us from DigixDAO.

Both Carbon Votes 1 and 2 were approved by DGD holders and the values of 1 and 2 above were decided to be 4.2% and 842 respectively. The addresses which participated in the Carbon Votes are allocated 10 Reputation Points for each vote. Hence, if you voted in both Carbon Votes 1 and 2, you will start with 20 Reputation Points for the launch of DigixDAO.

Source of Rewards

Participants and Moderators receive DGX as a reward for participating in DigixDAO, which can be claimed after the end of every Quarter. The DGX rewards are sourced from the transfer fees and demurrage fees built natively into the DGX token. All transfer fees and one-third of demurrage fees collected as at the end of each Quarter can be claimed as rewards.

Participant Rewards

During [Carbon Vote 1](#), DGD holders decided that 4.2% of the total DGX rewards will be set aside for Moderators, meaning that the Participant reward pool will consist of the remaining 95.8% of claimable DGX rewards as at the end of each Quarter.

As a Participant, the DGX that you can claim from the Participant reward pool is determined by 3-step process. Step 1 is to determine your base, which depends on your Stake in DigixDAO and how many Quarter Points you accumulated relative to the minimum Quarter Point threshold. Step 2 is to determine any bonus added to your base due to your Quarter Points and Reputation Points. Step 3 is to determine the amount of DGX you can claim using your base and bonus.

Step 1: Calculation of Base

- if *Quarter Points* \geq *Minimum Quarter Point Threshold*, then :

$$Base = Stake$$

- if *Quarter Points* $<$ *Minimum Quarter Point Threshold*, then :

$$Base = \frac{Quarter Points}{Minimum Quarter Point Threshold} \times Stake$$

Step 2: Calculation of Base with Bonus

$$Base\ with\ Bonus = Base \times \left(1 + \frac{Quarter Points - Minimum Quarter Point Threshold}{Quarter Point Scaling Factor}\right) \times \left(1 + \frac{Reputation Points}{Reputation Point Scaling Factor}\right)$$

Step 3: Calculation of Claimable DGX

$$Claimable\ DGX = \frac{Base\ with\ Bonus}{Total\ Base\ with\ Bonus\ of\ Participants} \times Participant\ Reward\ Pool$$

Where:

- *Base with Bonus* is your base including any bonuses from Quarter Points and Reputation Points
- *Base* means the base used to determine your claimable DGX rewards
- *Quarter Points* means the Quarter Points you accumulated over the Quarter
- *Minimum Quarter Point Threshold* has a value of 2 for the launch of DigixDAO
- *Quarter Point Scaling Factor* is used to determine the value of each Quarter Point is worth relative to your Base, which is set at 400 for the launch of DigixDAO
- *Reputation Points* means the Reputation Points you accumulated going into the current Quarter
- *Reputation Point Scaling Factor* is used to determine how much each Reputation Point is worth relative to your Base, which we have set as 2000 for the launch of DigixDAO. Quarter Points are valued higher than Reputation Points as Quarter Points represent active participation in the current Quarter and Reputation Points are merely accumulated passively over the existence of DigixDAO
- *Claimable DGX* is the amount of DGX you can claim
- *Total Base with Bonus of Participants* is the total value of base with bonuses of all Participants in DigixDAO
- *Participant Reward Pool* is 95.8% of all DGX transfer fees and one-third of demurrage fees collected as at the end of each Quarter

Applying steps 1-3 above and assuming:

- You are a Participant and not a Moderator
- You accumulated 10 Quarter Points over the current Quarter
- You locked 100 DGDs in DigixDAO during the Locking Phase
- You had 100 Reputation Points going into the current Quarter

- The total value of bases and bonuses of all Participants in DigixDAO is 10000
- 500 DGX was collected from transfer fees and demurrage fees as at the end of the Quarter

As a Participant, you will be able to claim approximately 5.13 DGX for your participation in the current Quarter.

Moderator Rewards

As a Moderator, you will be able to claim additional DGX rewards from a separate Moderator rewards pool. It was decided in Carbon Vote 1 that the Moderator rewards pool is 4.2% of the total DGX rewards. We decided to grant Moderators a separate pool of rewards for their additional work to filter out undesirable Projects at the [Idea](#) and [Draft](#) stages.

The process for calculating DGX rewards is similar to that of a Participant, except with certain adjustments to parameters.

Step 1: Calculation of Base

- if *Moderator Quarter Points* \geq *Minimum Moderator Quarter Point Threshold*, then :

$$Base = Stake$$

- if *Moderator Quarter Points* $<$ *Minimum Moderator Quarter Point Threshold*, then :

$$Base = \frac{Moderator\ Quarter\ Points}{Minimum\ Moderator\ Quarter\ Point\ Threshold} \times Stake$$

Step 2: Calculation of Base with Bonus

$$Base\ with\ Bonus = Base \times \left(1 + \frac{Moderator\ Quarter\ Points - Minimum\ Moderator\ Quarter\ Point\ Threshold}{Moderator\ Quarter\ Point\ Scaling\ Factor}\right) \times \left(1 + \frac{Reputation\ Points}{Reputation\ Point\ Scaling\ Factor}\right)$$

Step 3: Calculation of Claimable DGX

$$Claimable\ DGX = \frac{Base\ with\ Bonus}{Total\ Base\ with\ Bonus\ of\ Moderators} \times Moderator\ Reward\ Pool$$

Where:

- *Base with Bonus* is your base including any bonuses from Moderator Quarter Points and Reputation Points

- *Base* means the base used to determine your claimable DGX rewards
- *Moderator Quarter Points* means the Moderator Quarter Points you accumulated over the Quarter
- *Minimum Moderator Quarter Point Threshold* has a value of 4 for the launch of DigixDAO
- *Moderator Quarter Point Scaling Factor* is used to determine the value of each Moderator Quarter Point is worth relative to your Base, which we have set as 400 for the launch of DigixDAO
- *Reputation Points* means the Reputation Points you accumulated going into the current Quarter
- *Reputation Point Scaling Factor* is used to determine how much each Reputation Point is worth relative to your Base, which we have set as 2000 for the launch of DigixDAO
- *Claimable DGX* is the amount of DGX you can claim
- *Total Base with Bonus of Moderators* is the total value of base with bonuses of all Moderators in DigixDAO
- *Moderator Reward Pool* is 4.2% of all DGX transfer fees and one-third of demurrage fees collected as at the end of each Quarter

Applying steps 1-3 above and assuming:

- You are both a Moderator and Participant
- You accumulated 10 Moderator Quarter Points over the current Quarter
- You locked 842 DGDs in DigixDAO during the Locking Phase
- You had 412.5 Reputation Points going into the current Quarter
- The total value of bases and bonuses of all Moderators in DigixDAO is 10000
- 500 DGX was collected from transfer fees and demurrage fees as at the end of the Quarter

As a Moderator, you will be able to claim approximately an additional 2.16 DGX for your participation for the current Quarter.

Claiming Rewards

After the end of each Quarter, you are able to claim your DGX rewards directly to your address at any time from the start of the subsequent Quarter. Please note that when we activate demurrage fees, demurrage fees are still deductible even if you do not choose to claim your DGX rewards immediately after they are available. Hence, the same demurrage fees are payable on your DGX rewards whether they are in DigixDAO or you choose to claim them to your address.

If you do not choose to claim your DGX rewards immediately after they are available, they will accumulate over time based on your participation in DigixDAO.