

# WILLE

DAO Whitepaper

This whitepaper serves as a foundational document for the creation of a new DAO

It includes the organogram, by-laws, a roadmap and the basic smart contracts needed to operate

Our goal is to create an international treasury fund which will be managed by the community itself and to allocate these funds directly to projects, tasks and other interventions that will help society transition from a representative democracy to a more direct democracy, call it liquid or digital

We are organizing ourselves to launch the platform by mid 2022 and hope to achieve practical results beginning 2023. Our goal is to operate globally, but as with all situations where limited resources need to be managed we shall focus our attention to a particular country or a set of countries to begin with which will be decided by the DAO democratically

Welcome to WILLE!



"Arise, you have nothing to lose but your  
barbed wire fences!"

Timothy C. May, The Crypto Anarchist Manifesto, 1988



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## Mission

WILLE was thought of as a sister DAO to the mother project [NERV](#) – Network Emergency Response Volunteers. NERV's plan is to develop and implement digital tools in politics, in particular those related to on-line consensus which make use of [remote e-voting](#).

According to the Democracy Index published by The Economist, only 8.4% of the countries worldwide can be considered full democracies and around 35.6% of the world population lives in what can be considered to be authoritarian regimes!

### Democracy Index 2020, by regime type

	No. of countries	% of countries	% of world population
Full democracies	23	13.8	8.4
Flawed democracies	52	31.1	41.0
Hybrid regimes	35	21.0	15.0
Authoritarian regimes	57	34.1	35.6

Note. "World" population refers to the total population of the 167 countries covered by the Index. Since this excludes only micro states, this is nearly equal to the entire estimated world population.

Source: The Economist Intelligence Unit.

This state of affairs is completely unnecessary if we consider that with the advent of the internet (up to certain cybersecurity assumptions) remote e-voting is without questioning possible to do. Cryptography, the science that studies the transmission of secrets is what makes this possible. It's all just mathematics.

WILLE's mission is thus not only to develop this area but whenever possible to generate dividends from this activity and its crossovers with the private sector. Democratization of a society needs to occur at all levels be them governmental or other smaller ventures. To put into perspective, the [University of Minho](#) alone holds more than 400 elections every year between choosing representatives and managers of the institution to student associations and others. Work unions such as [Ordem dos Advogados](#), again in Portugal, are another type of institutions which are willing to become digitized and are currently investing in remote e-voting solutions. Estimates of the market value for elections worldwide is certainly in the range of the billions of dollars. For example the federal elections of 2015 in Canada required 65 000 polling stations, forced the citizens to leave their jobs or to interrupt their time off from work, and cost \$443 million including costs of hiring election officers and poll officials, printing lists of electors, and renting offices for the returning officers and polling station, material, training for returning officers and other staff, update of the National Register of Electors, etc..

Many private companies operate in the space that claim to be able to offer a complete solution and having deployed pilot experiments already such as [Agora](#), [Extreme Solutions](#), amongst others.

The goal of WILLE is to capitalize on the same market (...)

Because we operate according to [DAO principles](#) and make use of blockchain in all of its full capacity, our institution is transparent and uncensorable. Governance is conducted by our members who invest in the treasure. As a benefit for investing, members are invited to publish and vote on proposals that they consider relevant to the organization and make use of the available resources whether they are capital or human.

There's no central authority deciding for YOU what actions WILLE should be taking.

## Solutions

Remote e-voting has become a well understood practice. If it is true that on-line elections are an extremely sensitive topic, in the sense that it is expected that the outcomes are always valid and not corrupted, specially when the stakes are high, it is also true that it is one of the most basic building blocks without which anything else from corporate finance to cybersecurity in general would not be possible.

Solutions to promote the democratization of society do not end with software. Institutions or organizations that conduct open political debates as is the case with many universities, not for-profit associations that are focused in solving a particular problem in society, are examples of places where democratic practices are important. Software is certainly an important piece of the puzzle but other methodologies and experiences need to be addressed as well.

- Create software that facilitates on-line political debates and the generation of consensus.
- Develop solutions for electronic vote to be used even by the private sector.
- Create and contribute to spaces where political discussion happens such as with think-tanks, in universities and other governmental institutions. This is what we would usually call off-chain governance.
- Audit institutions in order to evaluate how democratic they really are.
- Publish a magazine where all these issues are investigated including reports on the state of the art of remote e-voting.



## Roadmap

2022 – develop the basic tools for internal use/political discussion consensus generation

2022 end of – Initial DEX offering hopefully pooling at least 100 000 \$

2023 – E2E-VIV demonstration by WILLE at a conference ([E-Vote-ID](#), [Authenticate 2020](#), [\(..\)](#))

2024 -supporting the first political party or another relevant political platform to use remote e-voting in a “developing country”

Reaching 100 000 users membership

2025 – having representative ambassadors well established in at least 50% of the countries worldwide.

2026 – 2029 - continued work

Reaching 1 000 000 users membership

2030 – remote e-voting solutions fully available in all the countries in the worldwide

Stakeholders

sdada

Membership

sdadsada

Reputation

sdadad

By-laws

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## Smart contracts

In general, all proposals are decided by simple majority consensus amongst members of the DAO. Because the treasury is managed by the shareholders, the weight of each vote is proportional to ownership of the shares. So say, if a member of the DAO holds 10% of the shares then a single vote by this member would weight 10% of the total ballot.

To mitigate for the domination of whales in the decision making we impose certain global constraints and suggest improved voting mechanisms such as quadratic voting and funding and positive and negative adaptive quorum biasing:

Transfers out of the treasury should be limited to a fixed maximum value of \$? and should be uphold for a minimal evaluation period stipulated in the by-laws.

For each proposal considered of medium to high impact an ethical committee is assigned to follow and report on the progress of the work and the correct application of the money.

In general proposals should be decided by(...)

<https://whiteboardcrypto.com/what-is-quadratic-funding/>

[https://en.wikipedia.org/wiki/Quadratic\\_voting](https://en.wikipedia.org/wiki/Quadratic_voting)

[https://docs.rs/pallet-democracy/3.0.0/pallet\\_democracy/#adaptive-quorum-biasing](https://docs.rs/pallet-democracy/3.0.0/pallet_democracy/#adaptive-quorum-biasing)

### Proposals

- construct proposal {  
publisher;  
type (task, job, contract, other):  
content;  
rate of approval;  
quorum reached;  
}

### KREDIT

- List SEELE members
- Construct Meeting {  
objective/subject;  
time/date;  
frequency;  
jitsi link to video:  
odysee link to video:  
IPFS hash to report:  
}

- construct Substitute member {  
    exiting member;  
    highest ranking NERV members queue list;  
    veto votes;  
}

### **Yellow, Blue and red teams**

- construct team {  
    name;  
    colour;  
    mission;  
    captain;  
    list coordinators;  
    list members;  
}
- Construct elect captain {  
    list self proposed captains;  
    list captains proposed by ambassadors;  
    list highest ranking members from amongst the team members;  
}
- construct accept new member {  
  
}
- construct expel member {  
  
}
- Construct Meeting {  
    objective/subject;  
    time/date;  
    frequency;  
    jitsi link to video:  
    odysee link to video:

IPFS hash to report:

}

### **Ambassadors**

- list ambassadors;
- Construct ambassador {  
address;  
country;  
}

### **Contractors**

- Construct contract {  
entity name:  
entity address:  
proposal:  
budget:  
payment\_scheduling:  
(...)  
}

### **Angels**

- Construct angels {  
target proposal;  
list committee members;  
}
- Construct Meeting {  
objective/subject;  
time/date;  
frequency;  
jitsi link to video:  
odysee link to video:  
IPFS hash to report:  
}



## Organogram

WILLE DAO is constituted around shareholders, ambassadors, captains, yellow, blue and red teams, the angels, the *founding group* named KREDIT, contractors and finally partnerships with another organization which is not part of WILLE but a sister-DAO named NERV.

**Shareholders** are all those who invest in WILLE with cryptocurrency:

- Any shareholder can propose, vote or delegate their own vote on a specific proposal or set of proposals on a specific topic to other members. Weight of the votes is proportional to the cryptocurrency invested.
- If vote turnout is consistently low, then proposals by shareholders should be approved by adaptive quorum biasing with positive turnout bias. Otherwise by simple majority.
- WILLE DAO is structured around tasks and jobs. Tasks can be executed by any member of the DAO at any point in time. These are rewarded either with an increase of reputation points or by receiving cryptocurrencies drawn from the DAO treasury. The establishment of these tasks and their rewards is done by those in managerial positions; captains establish the tasks, ambassadors help recruit and find participants willing to execute them and the ethical committees, named angels, supervise the whole process in efforts to bring to light any misbehaviour. **How to define how much exactly each task should be rewarded?**

### Ambassadors

The only requirement to be an ambassador is to have assisted a ? of meetings (received POAPs <https://medium.com/poap/what-is-poap-d7e8fdcf207d> ); onboarding meetings or meetings with the captains, and have been awarded the respective participation tokens. The role of the ambassador is to present the DAO to newcomers and to guide them in WILLE:

- Are responsible for the onboarding of new members. By onboarding new members ambassadors get an increase in reputation. Additionally ambassadors may get a cryptocurrency payment if members that join the DAO present a referral code
- When organizing hackatons ambassadors are automatically invited to be part of the hackatons organizing committee

### Captains

To be a captain it is required that a minimum ? reputation value is attained. Captains are the equivalent of directors in the traditional analogue corporate setting. Captains should establish objectives, propose tasks and jobs to the DAO. Should also work closely with ambassadors as some managerial tasks crossover between the two roles:

- Requires a minimum ? reputation value to be considered a captain
- Proposes tasks and jobs to the DAO. These proposals are curated separately from proposals by regular members and should be validated by adaptive quorum biasing with negative turnout bias
- Participate in regular meetings with ambassadors that should be made public

- Define groups within the yellow, blue and red teams and establish objectives for these groups. Each captain may lead a group of up to 150 people from within a single colour
- Assign coordinators within these groups to help manage the work. These coordinators may further divide the up to 150 people into smaller divisions in accordance with the captain

### **Yellow, blue and red teams**

Groups and sub-groups of members of the DAO each composed of at most 150 members and 15 coordinators. Each group elects a captain responsible for maintaining the repository/code/documentation and managing the team. Yellow teams are the main software developers, blue teams focus on cybersecurity defence and red team focus on attack vectors to the defences put forward by the blue team, in accordance to regular practices in cybersecurity.

### **Angels (ethical committees)**

Are groups formed from amongst members of WILLE DAO assigned the task of evaluating whether the allocated resources from the approved proposals are in fact being used in the right way.

- Any member of WILLE is eligible to be part of an angel work group (ethical committee)
- Likewise membership to an angel work group is not mandatory. Members are invited and are allowed to refuse participation without prejudice
- Angels are assigned according to a plurinominal vote consensus
- Ought to meet regularly and present a “report” (what kind?)
- A group of angels is instantiated for every approved considered of medium or high impact as established by WILLE’s by-laws
- An initial group of angels is appointed as co-founders to WILLE

### **KREDIT**

Is an invitation-only group co-founder of WILLE (along with angels mentioned in the previous point above) consisting of 10 members who help guide the work of the DAO by curating proposals. Ideally it’s constituted by the most notorious members, the members with the highest reputation, but initially it will be formed by the founding members of the project. It’s never enough to stress that the votes of members of KREDIT weight the same as any other vote from regular shareholders. Proposals by the KREDIT however get approved more easily than proposals set up by regular shareholders because of a different consensus mechanisms. We chose this way because it’s all too common that in DAOs there is a low voter turnout and as a consequent progress is often slow. Thus:

- Intervenes as content and proposals curators. KREDIT should video-conference frequently and publish the meetings discussing the work of the DAO and indicate possible directions
- If voter turnout is consistently low, then proposals by the KREDIT are approved by adaptive quorum biasing with negative turnout bias. Otherwise by simple majority.

### **Contractors**

We consider those as all private entities who contractualize with WILLE and provide some service in exchange for some value in cryptocurrency that is to be transferred directly from the DAO treasury. The choice of contractors, mission and objectives for the contractualization and the

overall value of the budget and how payments are to be scheduled in time is to be made by democratic consensual decision between the DAO members.

**NERV**

Is an entity outside the DAO whose mission and focus is aligned with the values of WILLE.

Shareholders

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Ambassadors

sadadad

Captains

sadadad

Yellow, blue and red teams

sadadad

Angels

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KREDIT

sadadad

Startup plan

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Contractors

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