

The Planet's Vote

WORLD DEMOCRATIC PLATFORM

A Framework for Planetary-Scale Direct Democracy

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The greatest threats to humanity — supervolcanic eruption, asteroid impact, pandemic, climate collapse — do not respect national borders. Yet our systems of governance remain fractured by exactly those borders. The Planet's Vote proposes a solution: a planetary-scale democratic platform designed to make corruption auditable and politically costly through which every human being on Earth may exercise their voice on the issues that affect all of us equally.

Executive Summary

The Planet's Vote is not only a response to threat. It is an act of aspiration.

Planetary democracy is often framed primarily in terms of what it prevents: extinction, collapse, catastrophic coordination failure. These are real and urgent concerns. But a platform that speaks only of danger cannot sustain the long-term participation and trust that planetary legitimacy requires. People cannot live permanently in existential mode.

The deeper proposition is this: humanity is capable of collective maturity — of choosing stewardship over extraction, coordination over conflict, long-term survival over short-term advantage — if given a verified, trusted, genuinely equal mechanism for doing so. The Planet's Vote is not a pessimist's emergency measure. It is an optimist's infrastructure project.

Legitimacy at planetary scale cannot emerge from one civilisational tradition alone. The history of global governance is predominantly a history of Western liberal democratic frameworks being offered as universal solutions — and being received, often correctly, as expressions of cultural particularity rather than universal truth.

The constitutional layer of The Planet's Vote must be developed through a process that actively incorporates African governance traditions, South Asian democratic philosophy, indigenous democratic practices, Middle Eastern legal scholarship, and non-Western constitutional frameworks. Not symbolically, but structurally. The process through which humanity defines the limits of its own planetary democracy must itself be a globally inclusive process, or the result carries the legitimacy only of those who designed it.

This principle requires concrete mechanisms, not aspirational language. The Planet's Vote commits to the following structural measures:

- Multilingual constitutional drafting forums — the constitutional shadow votes and foundational rights discussions are conducted simultaneously in major world languages, with translations prepared by human translators from the relevant linguistic communities, not automated systems.
- Regional expert panels in the ratification process — the scientific ratification body for constitutional questions includes representatives from each of the six geographic regions, with explicit representation requirements for African, South Asian, indigenous, Middle Eastern, and other non-Western governance traditions.
- Advisory council diversity as a hard requirement — the founding advisory council cannot proceed with constitutional work until it includes genuine representation from non-Western democratic and legal traditions. This is not a diversity target; it is a precondition.
- Published audit of civilisational representation — The Planet's Vote publishes an annual assessment of whether its constitutional development process is genuinely incorporating non-Western frameworks or merely citing them.

The Planet's Vote is a proposed global direct-democracy platform enabling every adult human being on Earth to vote on planetary-scale issues. It operates on a demand-triggered quarterly voting schedule — votes are called when verified individuals signal sufficient support for ratified

questions — and requires a supermajority threshold of 66.7% for any resolution to pass, ensuring that no bare majority can impose decisions on a near-equal minority.

For issues of existential or planetary-class urgency — asteroid impacts, supervolcanic eruptions, pandemic emergence, or ecological collapse — the platform incorporates an Emergency Override Protocol allowing a crisis vote to open within six hours of verified threat confirmation, bypassing the standard quarterly schedule.

Technology in The Planet's Vote is always subordinate to legitimacy. Where a technical approach serves transparency, accessibility, verifiability, and trust, it is adopted. Where it serves ideological commitment to a particular technological paradigm at the expense of those qualities, it is rejected. This principle — legitimacy first, technology in service of it — distinguishes The Planet's Vote from most governance technology projects and is central to its intellectual credibility.

2.1 The Jurisdictional Test

The most important constitutional question for any governance system is: what falls within its jurisdiction? The Planet's Vote defines its scope as planetary-scale issues — but without a precise test, that definition is vulnerable to gradual expansion. Almost any issue can eventually be framed as global: migration, economics, speech, energy, reproduction, food systems, education, public health. Over decades, jurisdiction naturally expands unless constitutionally restrained.

The Planet's Vote therefore adopts an explicit four-part constitutional jurisdictional test. A matter qualifies for planetary voting only if ALL of the following conditions are satisfied:

- The issue produces transnational consequences that materially affect humanity beyond national borders.
- No individual nation can effectively mitigate the issue alone.
- Coordinated planetary action substantially improves outcomes compared to uncoordinated national responses.
- The issue cannot reasonably be governed at a lower level of subsidiarity — that is, it cannot be adequately addressed by cities, regions, or nations acting independently.

This four-part test is constitutional. Any proposed question that fails any one of the four criteria is outside the scope of The Planet's Vote, regardless of how many people signal support for it. The scientific ratification process includes assessment of jurisdictional eligibility as a prerequisite step.

Provisional Out-of-Scope Categories

The jurisdictional test defines what The Planet's Vote may vote on. It is equally important to state explicitly what it may not vote on — at least until constitutional shadow votes establish different boundaries through democratic process.

The following categories are provisionally out of scope:

- Religion, religious practice, and the internal governance of religious institutions
- The internal constitutional arrangements of sovereign states, including electoral systems and governmental structures
- Language policy and the internal linguistic choices of nations and communities
- Cultural and educational content within national and regional jurisdictions
- Any matter that fails the four-part jurisdictional test, regardless of signal support

These provisional limits do not prevent these categories from becoming subjects of constitutional shadow votes — votes that ask whether the boundaries of The Planet's Vote's jurisdiction should be expanded. They prevent these categories from being treated as within scope before that constitutional conversation has occurred. The difference between a question about scope and a question within scope is itself constitutional, and that distinction will be enforced by the Jurisdictional Appeals Panel.

The Planet's Vote also explicitly states that no resolution it produces will override existing human rights instruments — including the Universal Declaration of Human Rights and the UN Convention on the Rights of Persons with Disabilities — unless a constitutional threshold significantly higher than the standard supermajority is met through a separate constitutional ratification process.

Jurisdictional Appeals Panel

Edge cases are inevitable. Some issues will sit on the boundary of the jurisdictional test — AI safety sub-domains, pandemic-related supply chains, transboundary resource management — where reasonable people applying the four-part test in good faith reach different conclusions. The Planet's Vote therefore establishes a standing Jurisdictional Appeals Panel to resolve these disputes.

The panel consists of rotating global scholars — drawn from legal, governance, and democratic theory backgrounds, with no more than one member from any single nation or civilisational tradition, appointed through an open public process. Its mandate is narrow: to determine whether a specific proposed question satisfies or fails each of the four jurisdictional criteria, and to publish its reasoning in full. The panel does not assess the desirability of a question or its likely outcome — only its jurisdictional eligibility.

Panel decisions may be appealed to the registered voter base through a defined process, ensuring that jurisdictional determinations remain ultimately accountable to the people the platform serves rather than to any appointed body.

Planetary Coordination Representatives are elected by regional supermajority and serve as the executive layer that translates passed resolutions into coordinated international action. All representatives require a minimum 66.7% mandate to hold office, with constitutional changes requiring an 80% threshold.

The platform is built on five technical pillars: decentralised self-sovereign identity verification, zero-knowledge voting proofs, open-source auditable code, blockchain vote confirmation, and a geographically distributed hosting infrastructure resistant to single-nation shutdown.

This white paper sets out the philosophical foundation, governance architecture, technical design, legal pathway, and implementation roadmap for The Planet's Vote. It is submitted as a living document, open to collaboration from governance scholars, technologists, legal experts, and democratic theorists worldwide.

Key Metric	Target
Eligible voters at launch	~5.2 billion adults globally
Supermajority threshold	66.7% (two-thirds) of participating voters
Crisis vote threshold	75% of participating voters

Constitutional threshold	80% of participating voters
Voting cycle	Quarterly (maximum four votes per year, demand-triggered)
Issues per cycle	Minimum 2, maximum 5 per quarterly vote + emergency overrides
Identity standard	Self-sovereign, biometric-verified, zero-knowledge
Representative term	Approximately one year
Minimum participation for validity	20% of registered voters globally

Part I: The Problem — Why Nations Cannot Solve Planetary Problems

1.1 The Structural Failure of Nation-State Governance

The nation-state is a remarkable human invention — a mechanism for organising collective decision-making across populations of millions. But it was designed for a world in which the most consequential threats were local or regional: invasion, famine, disease within borders. The 21st century has rendered that assumption obsolete.

The five greatest threats to human civilisation — supervolcanic eruption, asteroid or comet impact, pandemic, irreversible climate change, and the misaligned development of artificial general intelligence — share a single defining characteristic: they are indifferent to national borders. A Yellowstone eruption does not pause at the Canadian border. An asteroid does not negotiate with the UN Security Council. A novel pathogen does not check passports.

Yet our decision-making architecture remains profoundly national. The United Nations, the most ambitious attempt at international coordination in human history, operates by consensus among sovereign states. Decision-making at the required scale requires broad agreement among member states — a process that, by its nature, moves at a pace calibrated to diplomacy rather than to the urgency of planetary threats. The Planet's Vote does not propose to change this architecture. It proposes to add a new layer alongside it: a direct democratic mandate from the people of Earth that can inform and support the decisions these institutions must make.

Historical Precedent

The closest analogues to what The Planet's Vote proposes are the Antarctic Treaty System (1959), which placed an entire continent under cooperative international governance, and the Nuclear Non-Proliferation Treaty (1968). Both demonstrated that nations can cede a narrow domain of sovereignty when the existential stakes are sufficiently clear. The Planet's Vote extends this logic to its natural conclusion: a permanent, democratic mechanism for planetary governance on defined categories of global concern.

1.2 The Democratic Deficit in International Institutions

Existing international bodies were designed for a world that has changed profoundly since their founding. The structures of global governance that emerged in the mid-twentieth century reflect the geopolitical realities of that era, and have served important purposes in maintaining international cooperation and stability. The question The Planet's Vote asks is not whether these institutions have value — they do — but whether they are sufficient, alone, for the scale and speed of the planetary challenges now facing humanity. The Planet's Vote is designed to complement them, not to replace them, by providing something none of them currently possess: a direct, verified democratic mandate from the people of Earth.

The Planet's Vote does not propose to replace these institutions. It proposes to give them something none of them currently possess: a legitimate, direct democratic mandate from the human population of Earth. A resolution passed by 70% of participating voters across all regions of the world carries a moral and political authority that no treaty negotiated between governments can match. These institutions would retain their operational expertise and existing authority — The Planet's Vote would provide the democratic legitimacy that authorises them to act on behalf of all of humanity.

1.3 The Two Most Neglected Existential Threats

Supervolcanic Eruption

At least 20 supervolcanic systems worldwide are capable of eruptions orders of magnitude larger than any in recorded history. A Yellowstone-class eruption would inject sufficient sulphur dioxide into the upper atmosphere to reduce global temperatures by 5-10 degrees Celsius for three to seven years — collapsing agriculture, triggering famine at civilisational scale, and potentially killing billions of people within a decade of the event.

Current mitigation research is critically underfunded. No coordinated international programme exists to extract heat from any supervolcanic system. NASA has published preliminary proposals for deep geothermal drilling at Yellowstone, projecting that a network of boreholes could reduce eruption probability by up to 72% over a century at an estimated cost of \$3.46 billion — a sum roughly equivalent to three days of global military spending. The absence of such a programme is not a technical failure. It is a governance failure.

Near-Earth Object Impact

The most tractable of the planetary existential threats is also the one where governance has advanced furthest and stalled most conspicuously. NASA's DART mission in 2022 demonstrated that kinetic deflection of an asteroid is not science fiction — it works. We know what to do. We lack only the institutional framework to authorise doing it at planetary scale.

The International Asteroid Warning Network (IAWN) and the Space Mission Planning Advisory Group (SMPAG) exist as voluntary coordination bodies with no binding authority and no dedicated funding. The 1967 Outer Space Treaty restricts the use of nuclear devices in space — a restriction that may need revisiting for large-object deflection scenarios. None of these gaps can be closed without a legitimate global decision-making authority. The Planet's Vote provides exactly that authority.

Part II: The Solution — Architecture of The Planet's Vote

2.1 Foundational Principles

The Planet's Vote is built on seven foundational principles that distinguish it from all prior attempts at international democratic governance:

Principle	Definition	Implication
One Person, One Vote	Every adult human being has exactly equal voting weight regardless of nationality, wealth, or geography.	No nation's citizens count more than any other's.
Supermajority Legitimacy	No resolution passes without 66.7% of participating voters. Crisis and constitutional thresholds are higher.	Prevents bare-majority tyranny on planetary decisions.
Radical Transparency	Every line of code, every algorithmic parameter, every vote count is publicly auditable in real time.	Eliminates the possibility of hidden manipulation.
Cryptographic Privacy	Zero-knowledge proofs guarantee that individual votes cannot be identified or coerced.	Separates verifiability from identifiability.
Geographic Sovereignty	No single nation can shut down the platform. Infrastructure is distributed across jurisdictions.	Prevents authoritarian capture.
Scientific Grounding	The trending algorithm classifies questions by evidentiary confidence level, publishes minority scientific reports, and requires adversarial review — replacing subjective consensus weighting with auditable evidentiary classification.	Prevents misinformation from capturing the global agenda.
Subsidiarity	The Planet's Vote votes only on issues that genuinely require planetary-level coordination. All other matters remain with nations, regions, and communities.	Prevents global overreach into local affairs.

2.2 The Demand-Triggered Voting Model

The Planet's Vote does not operate on a fixed calendar. Votes are triggered by the demonstrated will of registered individuals — not by the passage of time. This demand-triggered model replaces the earlier lunar cycle schedule for two reasons: it reduces voter fatigue by ensuring that votes are called only when a sufficient number of people genuinely want them, and it ensures that each vote feels consequential rather than routine.

Votes are held on a quarterly schedule — a maximum of four times per year. When the threshold conditions described below are met, the questions that have crossed the threshold are held for the next quarterly vote. This gives voters a predictable rhythm while ensuring that no single well-organised campaign can force a vote on short notice. The Emergency Override Protocol operates entirely outside this quarterly schedule.

2.2.1 How Questions Are Proposed

Any verified individual registered voter may propose a question for consideration. Organisations, corporations, governments, and institutions may not propose questions — only individual human beings. This principle is non-negotiable.

The reason is straightforward. An employee whose employer proposes a question they personally oppose should not face retaliation for registering a contrary view. A scientist whose institution takes a position they disagree with should not be silenced. The moment organisations are permitted to propose or vote, the platform recreates the power imbalances it was designed to overcome. A corporation with a hundred thousand employees could flood the signal queue. A government could direct its civil servants. The Planet's Vote is a platform of individuals, by individuals, for the planet.

Proposed questions are submitted through the platform and enter a review queue. The proposer must be a verified registered voter. Multiple individuals may co-propose a question, but each counts as one signal.

2.2.2 Scientific Ratification by Individuals

Before a proposed question enters the active signal queue, it must pass a scientific ratification process. This process is conducted by individual scientists and researchers — verified as individuals with relevant expertise in the question's subject domain — not by institutions or organisations acting as bodies.

This distinction is deliberate. Scientists working within institutions are subject to the same organisational pressures as any other professional. A researcher at a climate institute whose employer has taken a public position on a question should be free to evaluate that question on its scientific merits as an individual, without their institution's endorsement being required or their disagreement being professionally costly. Individual scientists who participate in The Planet's Vote's ratification process do so as citizens of the planet, not as representatives of their employers.

The ratification process serves two purposes only:

- **Scientific soundness:** is the question grounded in scientific evidence, or does it misrepresent the state of knowledge? Questions that are factually incoherent or based on demonstrably false premises are returned to the proposer with an explanation.
- **Plain language phrasing:** is the question intelligible to a person with no specialist background? Questions that require technical knowledge to understand are rephrased — in consultation with the proposer — into language accessible to any adult on Earth.

Ratification is not a political gatekeeping function. A question that is scientifically coherent and clearly phrased must be admitted to the signal queue, regardless of how politically uncomfortable its implications may be. The ratification body has no authority to suppress a valid question on the grounds that it dislikes the answer a supermajority might give.

Individual scientific reviewers are volunteers. They participate because the questions matter to them as human beings. The Planet's Vote does not require institutional affiliations to participate in ratification — it requires demonstrated expertise, which may be evidenced through peer-reviewed publication, professional qualification, or other verifiable means.

2.2.3 The Signal Threshold — Phased by Registration

Once a question is ratified, it enters the active signal queue. Any registered voter may signal support for any question in the queue. Signalling is not voting — it is an expression of the view that this question deserves a formal vote. One person, one signal, per question.

The threshold required to trigger a formal vote is phased in proportion to the registered voter base, to ensure the platform can demonstrate real function during its early phase while scaling appropriately as it grows:

- Phase 1 — Registered voter base under 1 million: threshold is 100,000 individual signals.
- Phase 2 — Registered voter base between 1 million and 50 million: threshold is 1 million individual signals. This represents approximately 2% of the maximum Phase 2 base.
- Phase 3 — Registered voter base over 50 million: threshold is 2% of total registered voters. At a fully registered global electorate of approximately 5.5 billion adults, this equates to approximately 110 million individual signals — a number that dwarfs any petition or popular mandate in recorded history.

The 2% rate is maintained consistently across Phase 2 and Phase 3, providing continuity and predictability as the platform grows. The threshold is always calculated against the registered voter base at the time the question crosses it.

2.2.4 Triggering a Vote

A quarterly vote is called when a minimum of two ratified questions have each independently reached the signal threshold. A maximum of five questions may appear on any single quarterly ballot. If more than five questions have crossed the threshold in the same period, the five with the highest signal counts proceed to the vote; the others queue for the following quarter.

The minimum of two questions per vote serves an important purpose: it prevents a single well-organised campaign from dominating the vote calendar and ensures that the democratic event feels like a genuine planetary conversation across multiple issues rather than a single-issue referendum.

Once the threshold conditions are met, the vote opens at the next scheduled quarterly date. The target preparation window is 90 days from threshold to vote opening — sufficient time for voters to consider the questions, for plain-language summaries to be translated into major world languages, and for the platform to communicate the upcoming vote to all registered voters. This window may be extended in exceptional circumstances — armed conflict, pandemic, or natural disaster significantly affecting the platform's ability to reach voters — but any extension and its reason must be publicly announced.

2.2.5 Question Lifespan and Archive

Questions do not expire. A question that has been ratified and entered the signal queue remains active indefinitely. There is no deadline by which a question must cross the threshold or be discarded.

After one year in the active queue without crossing the threshold, a question moves to the The Planet's Vote Archive. The archive is publicly visible and remains active — any registered voter may continue to add their signal to archived questions at any time. If an archived question subsequently crosses the threshold, it returns to the active queue and proceeds to the next quarterly vote.

This design reflects a deliberate principle: a question that fails to reach threshold in its first year may become more relevant in its third year as the platform grows, as the underlying issue becomes more acute, or as more of the world registers. Democratic momentum should never be discarded. Questions wait; they do not die.

The archive also serves a historical function, recording the evolving concerns of registered voters over time and providing a public record of what humanity has considered worth discussing at planetary scale.

The demand-triggered model is designed around a single principle: that a planetary vote should happen when people genuinely want it, not because a calendar says so. The quarterly cadence provides rhythm and predictability. The signal threshold ensures that only questions with demonstrated planetary-scale concern reach the ballot. And the archive ensures that no legitimate concern is ever permanently silenced for failing to reach threshold at a particular moment in time.

2.3 Regional Legitimacy and Dual Concurrence

A global supermajority is powerful. But a vote can win globally while losing catastrophically in specific regions — and that asymmetry matters enormously for legitimacy.

Consider a resolution achieving 72% global support but rejected by 80% of voters in Africa, Latin America, or South Asia. Mathematically the supermajority is satisfied. But politically the outcome risks being perceived as precisely the imposition The Planet's Vote was designed to transcend. Historical patterns of colonialism mean a world vote weighted only by population could reproduce the same asymmetries of power it was meant to overcome.

The Planet's Vote therefore adopts a dual concurrence requirement: a global supermajority must be accompanied by minimum regional support across the platform's six defined geographic regions.

The Regional Concurrence Model

For a resolution to pass with binding authority, it must achieve:

- A global supermajority of 66.7% of participating voters; and
- A minimum of 40% support in each of the platform's six geographic regions: Africa, Asia-Pacific, the Americas, Eurasia, the Middle East and North Africa, and Other.

The regional minimum of 40% is not a veto — no single region can block a genuine global consensus. It is a floor ensuring no resolution passes in the complete absence of support from any part of the world.

Emergency Override Exception

The regional concurrence requirement does not apply to Emergency Override votes. In verified planetary emergencies, the global supermajority threshold alone determines the outcome.

The 40% regional floor is itself subject to constitutional process. If persistent structural disparities — infrastructure deficits, state repression, or systematic exclusion from identity pathways — make the floor unworkable in a specific region over an extended period, the floor may be revisited and adjusted through the multi-cycle constitutional ratification process. It cannot be lowered ad hoc. During shadow and advisory phases, results will be reported both as raw global and regional figures and as a “hypothetical binding status” — showing whether a resolution would have passed under binding rules — so that the community can see clearly what regional participation levels mean in practice.

2.4 Emergency Override Protocol

For threats of planetary-class urgency, the standard quarterly schedule is suspended. The Emergency Override Protocol allows a crisis vote to open within six hours of a verified threat confirmation, provided the confirmation meets the following criteria:

- Independent verification by at least three internationally recognised scientific institutions
- Classification of the threat as planetary-class by the Planetary Science Advisory Panel
- Formal notification to all registered voters via the platform's emergency broadcast system

Crisis votes remain open for 48 hours. The supermajority threshold is raised to 75% to reflect the gravity of the decision and the reduced deliberation time. Crisis resolutions authorise the Planetary Coordination Council to act immediately with the resources and mandate specified in the resolution.

The Emergency Override Protocol is not a mechanism for bypassing democracy — it is a mechanism for exercising democracy at the speed that existential threats demand. Every crisis vote remains subject to the supermajority threshold. The difference is time, not legitimacy.

2.5 Planetary Coordination Council

The Planetary Coordination Council is the executive body of The Planet's Vote — the mechanism through which passed resolutions are translated into coordinated international action. It is not a sovereign government. It has no authority to legislate beyond the mandates passed to it by the voting population. It is, in essence, the world's largest collective executive.

The Council consists of 17 Regional Representatives elected by supermajority vote within their regions, plus a Secretary-General elected by global supermajority vote. Representatives serve terms of approximately one year. Any representative whose approval rating falls below 55% in a mid-term confidence vote faces a recall election.

The Council's authority is strictly bounded: it may only act on resolutions that have passed the 66.7% supermajority threshold. It may not initiate action on any matter not explicitly mandated by a passed resolution. It reports publicly and in full on all actions taken in execution of passed resolutions.

2.6 The Constitutional Question — What Cannot Be Voted Upon

Every democratic system eventually confronts its deepest limit: what happens when a majority — even a supermajority — votes to do something that should not be done? The Planet's Vote is not exempt from this question. It must face it directly.

The 66.7% supermajority threshold provides strong protection against the tyranny of narrow majorities. But thresholds alone are not sufficient. History offers too many examples of overwhelming consensus being used to legitimate outcomes that violated the most basic conditions of human dignity. Any serious governance architecture must grapple with the question of what lies beyond the reach of any vote, however large.

The honest answer — and the one this white paper offers — is that The Planet's Vote does not yet know what those limits are. More importantly: the founder of this platform should not be the one to decide them. No individual can speak for all of humanity on a question of this magnitude. That would reproduce precisely the problem that The Planet's Vote was created to solve.

The Process Is Itself Democratic

The determination of what lies beyond the reach of any planetary vote is the most important constitutional question humanity will face in the development of this platform. It must be answered collectively, not declared by its founders. The Planet's Vote therefore proposes that the constitutional layer itself emerge from the platform — that the people who use it decide its own foundational limits.

This is not an evasion. It is a deliberate and principled choice. A constitution imposed by a founder carries the legitimacy only of that founder. A constitution ratified by a planetary supermajority carries the legitimacy of all humanity. The latter is worth waiting for.

In the interim, The Planet's Vote operates with a provisional set of scope limitations — the five issue categories defined in this white paper — which themselves represent a constitutional judgment about what belongs at planetary scale. These are not immutable. They are a starting point.

Proposed Shadow Votes on Constitutional Questions

The Planet's Vote proposes that among its earliest questions should be constitutional ones. The following are offered not as answers but as starting points for a planetary conversation:

- Are there rights so fundamental that no vote — however large — should be able to remove them? If so, what are they, and what threshold of consensus would be required to define and protect them?
- What are the minimum conditions for a human life to be possible? Access to breathable air, clean water, sufficient food, shelter, and sunlight are candidates. Should these be constitutionally protected beyond the reach of any planetary vote?
- What categories of issue should be permanently beyond the scope of The Planet's Vote, regardless of how many people signal support for them?
- What threshold of consensus — 90%, unanimous regional concurrence, multi-cycle ratification — should be required to establish or modify a constitutional protection?

These questions are not rhetorical. They are proposed for the platform itself. The shadow votes currently running on planetary defence, supervolcanic risk, climate, and AI governance are demonstrations of what the platform can do. The constitutional questions above are demonstrations of what the platform should eventually become.

Democracy Produces Legitimacy, Not Necessarily Wisdom

This white paper makes an honest acknowledgement that most governance frameworks avoid: a democratic vote produces legitimacy, but not necessarily truth or wisdom. A supermajority can be wrong. A global consensus can be frightened, manipulated, or simply mistaken.

The Planet's Vote does not claim to solve this problem. No governance system fully does. What it does claim is that a verified, transparent, supermajoritarian planetary mandate is a more legitimate basis for civilisation-scale decisions than the alternatives currently available — which are largely the unchecked authority of powerful states, corporations, and institutions that derive their power from accident of history rather than democratic consent.

The constitutional layer being proposed here is therefore not a claim that democracy always produces good outcomes. It is a claim that humanity deserves a mechanism to make collective decisions together — and that the limits of that mechanism should themselves be decided collectively, with full awareness of the risks.

The question of what cannot be voted upon is the most important question The Planet's Vote will ever face. It is also the one question that the platform's founder is least qualified to answer alone. That is why it belongs on the platform itself — as the first constitutional shadow vote in human history.

Part III: Technical Architecture

The Constitutional Ratification Process

Constitutional protections — rights and limits placed beyond the reach of standard supermajority votes — must themselves be established through a process more demanding than ordinary voting. A constitutional protection that can be created by a single supermajority vote is not genuinely constitutional.

The Planet's Vote therefore adopts a multi-cycle ratification process. For a principle to achieve constitutional status, it must:

- Pass a first global vote with the standard 66.7% supermajority threshold and regional concurrence.
- Remain in the active constitutional queue for a minimum of four years, subject to continued deliberation and challenge.
- Pass a second global vote achieving 80% support globally and 50% in each geographic region.
- Be confirmed by a third vote held no less than two years after the second, achieving the same 80%/50% thresholds.

This multi-cycle process ensures that no temporary surge of opinion can entrench a constitutional principle before it has been tested by time and deliberation. Constitutional protections built this way carry a legitimacy that no single vote — however large — could achieve alone.

3.1 The Identity Layer — The Foundational Problem

The single most technically challenging component of The Planet's Vote is the identity layer: the mechanism by which the platform verifies that every voter is a real, unique human being, without creating a centralised database that can be corrupted, hacked, or weaponised by any government or corporate actor.

This is not merely a technical challenge — it is a philosophical and political one. Any identity system that relies on government-issued credentials reproduces the power imbalances of the existing state system. Any system that relies on a private corporation introduces a single point of failure and a profit motive misaligned with democratic integrity. The Planet's Vote requires a third path.

The Ring VRF Architecture

Following detailed technical analysis of the available approaches to ZK-based identity at scale, The Planet's Vote adopts the Ring Verifiable Random Function (ring VRF) with registered public key as its recommended identity architecture. This approach — formalised in a 2023 paper by researchers at the Web3 Foundation and implemented in the Polkadot ecosystem — provides the optimal balance of the required properties.

The mechanism works as follows. Each voter registers once by generating a zero-knowledge proof (SNARK) of their ePassport — proving possession of a valid government-issued biometric document without revealing any of its contents. This registration creates a fresh public key that is entered into a ring of all registered voter keys. The raw ePassport data is never stored. Subsequent voting uses this ring VRF key to cast anonymous votes: the system can verify the vote comes from a registered unique human, but cannot determine which registered human cast it.

This approach solves three of the four key problems identified in prior ZK voting research:

- **Electricity efficiency:** registration generates one proof once; subsequent votes are computationally lightweight.
- **Anonymity:** ring signatures make it cryptographically impossible to link a vote to a specific registered identity.
- **Verifiable uniqueness:** the nullifier mechanism ensures each registered key can only vote once per cycle, without revealing which key voted.

The vote-selling problem. Vote-selling resistance is an active research focus for The Planet's Vote. This challenge is not unique to the ring VRF architecture — it is a feature of all remote voting systems, including established national e-voting platforms. Swiss Post's e-voting system, the most rigorously audited operational e-voting platform currently in production, demonstrates in practice that the same security principles The Planet's Vote is designing toward are achievable: end-to-end encryption, cryptographic vote-mixing that prevents any inference between a voter's identity and their vote, tamper-proof audit logs, and administrator-proof architecture. The Planet's Vote is actively seeking collaboration with Swiss Post's Cryptography Center to inform the technical implementation of these principles in a planetary-scale context. The social and legal framework surrounding The Planet's Vote treats vote-selling as a violation of the platform's founding charter, complementing technical protections with institutional and legal safeguards.

A candid acknowledgement: certain forms of coercion cannot be fully solved by cryptography. In-home threats, employer surveillance of registration, and state-level intimidation of voters require legal and social enforcement rather than technical mitigation. The Planet's Vote's cryptographic

architecture eliminates the ability to prove how someone voted after the fact — removing the value of vote-buying receipts and third-party verification demands — but it cannot prevent someone from being watched while they vote. The platform is honest about this boundary. No remote voting system at any scale has solved it fully. The goal is to minimise the attack surface and ensure that coercion attempts are detectable, documented, and publicly reported, not to claim that coercion is impossible.

Existing Implementations

A critical advance since the original drafting of this white paper is that the core technical components of The Planet's Vote's identity layer are no longer theoretical. Multiple open-source implementations now exist:

- **zkPassport:** An open-source implementation that reads ePassport NFC chips and generates ZK proofs of personhood without revealing passport contents. Already functional on standard NFC-capable smartphones. See zkpassport.id.
- **Google Longfellow ZKP:** Google open-sourced its zero-knowledge proof libraries in July 2025, specifically designed for privacy-preserving identity verification at scale. Available at github.com/google/longfellow-zk.
- **EU eIDAS ZKP Wallet:** The European Union's eIDAS regulation, taking effect in 2026, mandates ZKP integration into the European Digital Identity Wallet — providing government-backed ZK identity infrastructure for over 440 million citizens.
- **Human Passport (formerly Gitcoin Passport):** A modular proof-of-personhood system combining ZK-powered passport verification, on-chain reputation, and multiple identity pathways. Already deployed with millions of users. See human.tech.

The ePassport Coverage Gap

The ring VRF ePassport approach has one significant structural limitation: global passport ownership is uneven. Coverage varies substantially by country and income level, with lower rates in parts of sub-Saharan Africa, South Asia, and the Pacific. A system requiring an ePassport would structurally exclude a significant portion of humanity — precisely the populations that existing governance systems already marginalise.

This gap is acknowledged honestly and addressed through the parallel identity pathways described below. The ring VRF ePassport pathway is the primary and most cryptographically robust route; it is not the only route. All pathways produce an identical ZK credential upon registration. The platform cannot distinguish, and does not record, which pathway any individual used.

Parallel Identity Pathways

The Planet's Vote mandates multiple parallel pathways to identity registration. No single method is compulsory. The platform is designed so that neither physical capability nor document availability determines whether a person can participate in planetary democracy.

Pathway 1 — ePassport ZK Registration (Primary): Using a smartphone's NFC reader, the voter's ePassport chip is read and a ZK proof is generated locally on the device. No passport data leaves the device. The proof is submitted to the registration network, which verifies uniqueness and issues a ring VRF key. This pathway is available to anyone with an NFC-enabled smartphone and a biometric passport.

Pathway 2 — Community Attestation Network: For people without ePassports or NFC-capable devices, a network of in-person community verification centres — particularly in low-connectivity regions and in communities with high rates of disability — where trained facilitators assist with registration. Community attestation uses a web-of-trust model: existing verified voters can attest to the identity of new registrants, with cryptographic safeguards against attestation fraud.

Pathway 3 — Scramble-Pad PIN with Supervised Registration: For people who cannot use biometric scanning or NFC due to physical disability, a randomised PIN entry system — a scramble pad — where numeric positions change with every use, defeating shoulder-surfing and recording attacks. Registration is conducted once through an assisted process. This pathway was identified by The Planet's Vote's founder, Paul Innes — a quadriplegic who cannot use standard biometric methods — as an essential accessibility requirement.

Trust Acquisition — The Social Challenge

Technically sound systems can fail socially. Many communities — indigenous populations, people under authoritarian governments, undocumented people, dissidents, refugees, religious minorities — have deep and historically justified reasons to distrust biometric systems, even privacy-preserving ones.

The Planet's Vote requires not only a technical identity architecture but a trust acquisition strategy:

- Independent civil liberty oversight bodies, with authority to audit the identity layer and publish findings.
- Human rights observer status for recognised international human rights organisations, with guaranteed access to platform processes.
- Regional trust councils in each of the six geographic regions, whose concerns must be publicly addressed before a vote proceeds.
- Community pilot programmes in diverse contexts, with results published in full before any large-scale deployment.

The goal is not merely to build a technically trustworthy system. It is to build one that is socially trusted — and those are different things.

Non-State Identity Pathways

The ePassport-anchored identity pathway has a structural vulnerability: it depends on state-issued documents. Authoritarian regimes can selectively deny passports to dissidents, political opponents, or entire populations. A platform that claims to speak for all of humanity cannot allow any state to unilaterally disenfranchise its citizens.

The Planet's Vote therefore commits to developing and recognising the following non-state identity pathways alongside the ePassport route:

- UNHCR-issued refugee and stateless person documents, recognised as equivalent to national identity for registration purposes.
- Trusted international NGO-issued digital credentials, anchored to multiple independent verifiers to prevent single-point capture.
- Community credentials verified by multiple independent attestors across different organisations and jurisdictions, with anomaly detection for clustered or suspicious attestation patterns.

No state may unilaterally revoke or block a registered voter's participation. Any challenge to a voter's registration requires evidence, is heard by a multi-party oversight panel, and is subject to cryptographic audit. The architecture is designed so that even a coordinated state effort to block participation by its citizens can be detected, reported, and — through parallel pathways — mitigated.

The Planet's Vote therefore elevates accessibility from a design feature to a foundational democratic doctrine: if even one class of human beings cannot participate in a planetary vote, the mandate that vote produces is incomplete. A 66.7% supermajority of those who could participate is not the same as a 66.7% supermajority of humanity.

To illustrate how the safeguards interact: consider an authoritarian government attempting to block its citizens' participation by revoking passports and harassing community attestation centres. This attack triggers multiple parallel responses. Affected voters shift to UNHCR documents or NGO-issued credentials, activating non-state identity pathways. Anomaly detection flags the cluster of revocations and attestation interference, generating a public alert. The regional trust council raises a formal concern that must be publicly addressed before any vote proceeds. Human rights observers document the interference. The immutable public log records the full sequence. The government's actions are visible, documented, internationally recorded, and only partially effective — precisely the outcome the architecture is designed to produce.

This doctrine means every design decision must be evaluated against: could a person with the most significant access barriers still fully participate? Where the answer is no, the design is not finished.

The UN Convention on the Rights of Persons with Disabilities establishes participation in political and public life as a fundamental human right. The Planet's Vote treats this not as a compliance obligation but as the minimum acceptable standard.

Pathway 4 — Adaptive Interface and Voice Access: The Planet's Vote voting interface is designed to be fully operable by voice command, switch access, and other assistive technologies. The UN Convention on the Rights of Persons with Disabilities establishes participation in political and public life as a fundamental right. The Planet's Vote treats this not as a compliance obligation but as a design principle.

All pathways produce a cryptographically identical ZK credential. The platform cannot distinguish between them. A vote cast through Pathway 3 is indistinguishable from a vote cast through Pathway 1 in every respect except the registration mechanism. The democratic weight is equal.

Uniqueness Binding

Across all pathways, the core guarantee is uniqueness binding: the cryptographic assurance that each registered credential corresponds to exactly one living human being, and that no person can register more than once. This is achieved through:

- Nullifier mechanisms that detect and reject duplicate registrations without revealing the identity of the duplicate
- Cross-pathway deduplication proofs that prevent the same person from registering through multiple pathways
- Revocation protocols that allow credentials to be invalidated if fraud is detected, without disrupting the anonymity of legitimate voters

The identity layer is The Planet's Vote's hardest unsolved engineering problem. This white paper sets out the architecture with honesty about what is currently implemented (the shadow vote platform), what is technically available in open-source form (zkPassport, Longfellow ZKP, Human Passport), and what remains to be built (the full ring VRF registration and voting integration at planetary scale). The Planet's Vote invites cryptographers, identity researchers, and governance technologists to engage with this problem directly.

Post-quantum cryptographic readiness is an explicit design requirement. Current ZK proof systems rely on mathematical problems that quantum computers of sufficient scale could eventually solve. A platform designed to operate over decades must plan for this. The Planet's Vote commits to adopting post-quantum cryptographic primitives as they become standardised, and to engaging with relevant standards bodies including NIST's post-quantum cryptography standardisation process. Swiss Post's Cryptography Center, already developing quantum-resistant algorithms for its operational e-voting system, is a natural collaboration partner for this work.

Offline and Low-Bandwidth Protocol

The 3.2 billion people currently without reliable internet access cannot be an afterthought. The offline participation commitment requires a concrete cryptographic architecture, not just an aspiration.

The Planet's Vote commits to the following offline protocol design: SMS-based and community-centre-assisted voting will use local devices — at verified community registration points — that generate zero-knowledge proofs on behalf of voters under strict transparency and audit conditions. The voter's choice is never transmitted in plain text. The ZK proof is generated locally and submitted to the distributed network when connectivity is available, preserving the same anonymity and verifiability guarantees as the online pathway. Reference implementations for feature-phone and community-centre contexts will be open-sourced alongside the main client, and will be developed in collaboration with communities in low-connectivity regions from the earliest pilot phases.

Information Integrity and Anti-Manipulation Architecture

The most significant emerging threat to any large-scale democratic system is the information environment surrounding it. AI-generated persuasion systems, synthetic political personalities, and microtargeted manipulation are present realities that will grow considerably more powerful over the lifetime of The Planet's Vote.

The platform cannot eliminate manipulation. No system can. But it must visibly resist it. The Planet's Vote therefore adopts an information integrity doctrine:

- All content submitted to the platform must carry verifiable source attribution.
- AI-generated content must be clearly labelled. Unlabelled AI content in platform contexts is a violation of the founding charter.
- Every ratified question is accompanied by adversarial argument presentation: the strongest case for each available option, prepared independently and published alongside the question.
- Astroturfing detection systems — identifying coordinated inauthentic signal campaigns — are part of the algorithm audit requirements.

- Civic deliberation systems — citizen assemblies, rotating deliberative panels, AI-assisted neutral summarisation — are the next major philosophical evolution of the platform. A minimal deliberation layer will be present from the Phase 3 shadow vote: mandatory pro/con briefs prepared independently for each ratified question, curated expert statements from scientists and practitioners in the relevant field, and a moderated multilingual global discussion forum. No planetary vote proceeds without these deliberation resources being available to every registered voter. The fuller civic assembly architecture will be developed as the voter base and resources permit.

Where AI assistance is used within the platform itself — for summarisation, translation, question phrasing — this is disclosed publicly. The platform defines and publishes specific categories in which AI assistance is permitted and prohibited.

3.2 The Voting Layer

Votes on The Planet's Vote are cast, recorded, and tallied using a protocol that satisfies four simultaneous requirements that are in tension with each other in conventional voting systems:

- Anonymity: no individual vote can be traced to a specific voter
- Verifiability: every voter can verify their own vote was correctly recorded
- Universal verifiability: any observer can verify the correctness of the overall tally
- Coercion-resistance: no voter can prove how they voted to a third party, substantially reducing the viability of vote-selling or coercion — a design principle demonstrated in practice by operational e-voting systems including Swiss Post's

These requirements are satisfied by a combination of homomorphic encryption (which allows votes to be tallied without decrypting individual ballots) and zero-knowledge range proofs (which allow voters to verify their vote was counted without identifying which vote was theirs).

3.3 Infrastructure and Resilience

The Planet's Vote's infrastructure is deliberately designed to be unshutable by any single nation or coalition of nations. This is achieved through:

- Distributed hosting across jurisdictions in at least 12 nations with strong rule-of-law protections for internet infrastructure
- Peer-to-peer fallback protocols that allow the platform to operate via direct device-to-device communication even if centralised infrastructure is taken offline
- Open-source software that can be re-deployed by any party if the primary deployment is compromised
- Cryptographic signing of all data, making tampering immediately and publicly detectable

3.4 The Algorithm Audit System

The trending algorithm is published as open-source code on a public repository with full version history. All parameter changes are announced with a minimum 30-day notice period and subject to a public comment process. An independent Algorithm Audit Committee — appointed by the

Planetary Coordination Council but operationally independent of it — reviews all algorithm decisions and publishes quarterly audit reports.

Part IV: Legal and Political Pathway

4.1 No Military Authority — An Explicit Constraint

The Planet's Vote possesses no standing military, no coercive enforcement arm, and no unilateral force authority. This is not an omission — it is a constitutional constraint. The platform's authority derives entirely from democratic legitimacy, not from the capacity to compel.

This constraint must be stated explicitly because critics of any global governance proposal will project the fear of military consolidation onto it. History offers many examples of institutions that began as coordination mechanisms and evolved into coercive authorities. The Planet's Vote pre-emptly addresses this concern by making the absence of enforcement authority a constitutional feature that would require a constitutional process to change.

The platform's enforcement mechanism is legitimacy itself. A verified supermajority mandate of humanity carries political and moral weight that governments cannot easily ignore — not because they are compelled, but because the cost of defying a documented global consensus is itself a form of political consequence.

4.1 The Legitimacy Question

The most frequent objection to proposals for global democratic governance is the question of legitimacy: by what authority does any body claim to speak for humanity? The Planet's Vote's answer is straightforward and unprecedented: it derives its authority from the direct, voluntary participation of the largest possible number of human beings, expressing their preferences through a transparent, verifiable process.

This is qualitatively different from the legitimacy claim of any existing international institution. The UN General Assembly derives its legitimacy from the consent of member governments, not from the direct consent of their populations. The Planet's Vote derives its legitimacy from the direct consent of individuals.

This does not mean The Planet's Vote's authority is unlimited or automatically binding. In its initial phase, The Planet's Vote's resolutions are politically and morally authoritative but not legally binding under international law. The legal binding mechanism must be built through a parallel process of treaty ratification by nation-states.

4.2 Staged Authority — The Evolutionary Pathway

The Planet's Vote does not arrive fully formed with binding global authority. What it proposes is a staged evolution — from democratic signal to advisory coordination to treaty-linked mandate to operational authority — in which each stage builds legitimacy before claiming power.

Phase A — Democratic Signal (Current)

The platform operates as a planetary polling and signalling system. Shadow votes record genuine preferences of registered individuals. Results carry no formal authority but generate documented democratic mandates that governments and institutions cannot easily ignore. This is where The Planet's Vote stands today.

Phase B — Advisory Coordination

As the voter base grows and credibility is established, The Planet's Vote submits results to the UN General Assembly, major international bodies, and national governments as documented democratic mandates. Governments acting in accordance with planetary votes are recognised as founding signatories.

Phase C — Treaty-Linked Mandate

Founding signatory nations formalise their relationship through treaty arrangements, committing to implement resolutions achieving the supermajority threshold in defined issue categories — beginning with planetary defence and pandemic preparedness.

Phase D — Operational Coordination Authority

The long-horizon goal: a platform with verified global participation, an established constitutional layer, and treaty relationships sufficient for resolutions to carry genuine operational weight. This phase is measured in decades.

The distinction between Phase A and Phase D is one of legitimacy. A platform that has spent twenty years building trust and accumulating a genuine democratic record arrives at operational authority having earned it.

4.4 Failure Mode Governance

Legitimacy requires visible recovery mechanisms. A platform that describes only how it works when everything goes right will be rightly challenged on what happens when things go wrong.

Disputed results: An independent technical audit panel conducts a full cryptographic audit and publishes its findings. The vote result is suspended pending audit if the challenge meets a defined evidence threshold.

Fraud allegations: All vote data is written to an immutable public log. Independent researchers may verify at any time. Fraud allegations unresolvable by cryptographic audit are referred to an international independent review panel.

An independent audit committee — appointed through an open public process, with no more than one member from any single nation or institution, and subject to recall by a supermajority of the Planetary Coordination Council — has standing authority to examine any aspect of the platform's operations and publish findings without prior approval from the platform's founders or administrators. Its mandate covers the algorithm, the identity layer, vote counting, information integrity systems, and the emergency override process. Its reports are published in full and cannot be redacted.

To prevent the audit committee and constitutional review panels from being captured by professional or regional elites, The Planet's Vote introduces limited sortition into its oversight architecture. A defined proportion of seats on each oversight body — no less than one third — are filled by randomly selected verified registered voters, drawn by cryptographically auditable lottery. Sortition members serve fixed terms, receive appropriate support and briefing to perform their role effectively, and cannot be removed except for demonstrated cause through a defined process. All appointed members of oversight bodies serve staggered terms with defined limits, and must publicly disclose all funding sources, institutional affiliations, and potential conflicts of interest, with automatic recusal applying to decisions where a conflict exists.

Software compromise: The open-source distributed architecture means no single compromise can alter outcomes undetected. In confirmed compromise, the affected vote is invalidated and rerun.

Regional boycott: The dual concurrence requirement means a regional boycott may prevent a resolution from achieving its regional floor. This is by design. A resolution without minimum support in any major region has not achieved planetary legitimacy.

Constitutional crisis: Disputes about constitutional scope are referred to an independent constitutional review panel before a vote proceeds. The panel's finding is published and may be appealed through a process defined in the founding charter.

The Planet's Vote does not claim that all failure modes are anticipated. It claims that the commitment to visible recovery mechanisms is itself a form of institutional legitimacy.

4.3 The Treaty Pathway

The path to legal recognition proceeds through the following stages:

1. Foundational Charter: Drafting and publication of The Planet's Vote's founding charter, defining the scope of the platform's authority, the structure of the Planetary Coordination Council, and the rights and obligations of member citizens.
2. Founding Nation Signatories: Identification of 10-15 nation-states willing to be founding signatories — nations that agree to honour The Planet's Vote supermajority votes on defined issue categories within their jurisdictions. Founding signatories may come from any region of the world; the criteria are democratic governance, a track record of constructive multilateral engagement, and willingness to participate in a genuinely novel democratic experiment. No nations are named here as candidates, as any such list risks creating the impression that The Planet's Vote is aligned with particular political traditions or regions — a perception fundamentally at odds with the platform's founding principle that no nation, perspective, or bloc holds a privileged position.
3. UN General Assembly Recognition: Submission of The Planet's Vote as a recognised civil society platform to the UN General Assembly, seeking observer status and formal acknowledgment of its legitimacy as a global democratic voice.
4. Binding Issue-by-Issue Ratification: For specific issue categories — beginning with planetary defense and pandemic preparedness — negotiation of binding international agreements that formally incorporate The Planet's Vote supermajority votes into treaty obligations.
5. Full Constitutional Recognition: Over a generational timeframe, the progressive expansion of The Planet's Vote's binding authority across all planetary-class issue categories, constitutionalised through a global treaty.

4.3 Relationship with Existing Institutions

The Planet's Vote is not designed to replace the United Nations, the International Court of Justice, the World Health Organization, or any other existing international institution. It is designed to provide these institutions with something they currently lack: a democratic mandate from the population they serve.

In practical terms, this means The Planet's Vote resolutions on planetary defense, climate, pandemic preparedness, and AI governance are transmitted to the relevant existing institutions as formal mandates from the global citizenry. Those institutions retain their operational and technical expertise. The Planet's Vote provides the democratic legitimacy that authorises them to act.

The relationship between The Planet's Vote and existing international institutions should be understood as analogous to the relationship between a national parliament and its executive agencies: the parliament provides the mandate, the agencies provide the implementation capacity. Neither can function legitimately without the other.

Part V: The First Vote — Planetary Defense

5.1 Why Planetary Defense is the Right First Issue

The choice of the first real issue to put before a global democratic vote matters enormously. It must be an issue where the case for global coordination is overwhelming and uncontroversial, where the science is clear, where the cost is manageable relative to the stakes, and where success would demonstrate The Planet's Vote's value beyond any reasonable doubt.

Planetary defense — specifically, the establishment of a permanent, internationally funded Near-Earth Object monitoring and deflection capability — satisfies all of these criteria.

- The science is unambiguous: asteroid and comet impacts have caused mass extinctions in Earth's past and will do so again without intervention
- The technology works: NASA's DART mission proved kinetic deflection in 2022
- The cost is negligible: a comprehensive global planetary defense system costs approximately \$1-2 billion per year — less than 0.003% of global GDP
- The issue is non-ideological: no political philosophy opposes not being struck by an asteroid
- No single nation can do it alone: planetary defense requires global telescope coverage, global early warning, and global coordination of deflection missions

A genuine global vote on planetary defense, achieving a 70%+ supermajority, would produce a mandate that no existing international institution has ever had. It would be politically impossible for the UN, NASA, ESA, and national governments to ignore. It would prove the concept of The Planet's Vote in a way that no theoretical argument can.

5.2 The Shadow Vote Strategy

Before The Planet's Vote achieves full legal recognition, a Shadow Vote strategy allows the platform to build its voter base, demonstrate its technical capability, and generate politically significant mandates.

A Shadow Vote is a fully functional, technically rigorous, publicly verifiable vote that is non-binding in international law but carries significant political and moral weight. The strategy proceeds as follows:

6. Technical deployment of the full The Planet's Vote platform for a single issue vote
7. Open registration to any adult globally with internet access and a verifiable identity credential
8. A quarterly vote on the planetary defense mandate question
9. Full public reporting of results with cryptographic verification
10. Formal submission of the result to the UN General Assembly, NASA, ESA, and relevant national governments

11. Media and civil society campaign framing the result as the first genuine democratic mandate from humanity on a planetary issue

A Shadow Vote achieving participation from 100 million or more voters across all regions, with a strong supermajority for planetary defense funding, would be a historic political event — regardless of its formal legal status.

Part VI: Implementation Roadmap

Phase	Actions and Milestones
Phase 0: Foundation (Months 1-6)	Publish white paper globally. Establish open-source GitHub repository. Convene founding advisory council of governance scholars, cryptographers, and democratic theorists. Begin identity layer technical specification.
Phase 1: Identity (Months 6-18)	Partner with SSI standards bodies (W3C DID Working Group, Worldcoin Foundation). Develop privacy-preserving biometric identity protocol. Pilot with 1 million volunteer registrants across 10+ nations. Security audit by independent cryptographers.
Phase 2: Platform Build (Months 12-24)	Build full The Planet's Vote platform on open-source stack. Zero-knowledge voting protocol implementation. Distributed infrastructure deployment across 12+ jurisdictions. Algorithm audit system operational. Independent security penetration testing.
Phase 3: Shadow Vote (Month 24-30)	Run first Shadow Vote on planetary defense mandate. Target: 50 million+ registered voters globally. Full public result reporting. Submit to UN General Assembly and major space agencies. Global media campaign.
Phase 4: Treaty Pathway (Months 30-60)	Engage founding nation signatories. Draft The Planet's Vote Founding Charter. Submit for UN General Assembly observer status. Begin binding treaty negotiations on planetary defense and pandemic preparedness issue categories.
Phase 5: Scale (Year 5+)	Expand registered voter base toward universal adult enrolment. Progressive expansion of binding treaty authority. Full Planetary Coordination Council elections. Transition from Shadow Votes to binding resolutions on founding signatory issues.

6.1 Funding the Initiative

The initial development of The Planet's Vote is funded through a combination of philanthropic grants, open-source community contribution, and founding nation-state support. The platform must be — and must be seen to be — independent of any single government, corporation, or billionaire funder. Funding governance is therefore as important as technical governance.

A The Planet's Vote Foundation, structured as an internationally registered nonprofit with a multi-stakeholder board, will receive and allocate all funding. All financial accounts will be published in real time on a public ledger. No single donor may contribute more than 5% of the annual operating budget, preventing capture by any single interest.

The 5% donor cap is reinforced by explicit anti-stacking rules: donors linked by common ownership, common control, or common beneficial interest are treated as a single donor for the purposes of the cap. State-linked donors, sovereign wealth vehicles, and entities with demonstrable government direction are subject to enhanced due diligence. All donors above a minimum disclosure threshold are publicly identified by name, jurisdiction, and donation amount in real time in the public funding ledger.

No current head of state, cabinet minister, or equivalent executive official of any government may serve on the Planetary Coordination Council or any of the platform's appointed oversight bodies. This constraint exists to prevent overt state capture of the platform's institutional layer.

The estimated cost of Phases 0-3 is approximately \$38-55 million over 30 months — a sum well within reach of a coordinated global philanthropic effort, particularly given the existential stakes the platform is designed to address.

Part VII: Anticipated Objections and Responses

7.1 "National sovereignty will prevent adoption"

The Planet's Vote does not ask nations to surrender sovereignty on domestic matters. It asks them to participate in coordinated decision-making on the narrow category of issues that are inherently planetary in scope. No nation is sovereign over an asteroid's trajectory. No nation is sovereign over a supervolcanic eruption's atmospheric effects. The sovereignty objection is most powerful precisely where it matters least — on the issues The Planet's Vote is designed to address.

7.2 "The digital divide excludes billions"

This objection is taken seriously. In 2026, approximately 3.2 billion people lack reliable internet access. The Planet's Vote's design must accommodate offline and low-bandwidth participation from the outset — through SMS-based voting protocols, in-person community verification centres in low-connectivity regions, and partnerships with local civil society organisations. Universal participation is a design requirement, not an aspiration. The platform is not legitimate if it structurally excludes the Global South.

7.3 "Misinformation will corrupt the vote"

The trending algorithm's scientific consensus weighting is specifically designed to resist misinformation capture of the agenda. For empirically grounded issues, the algorithm boosts issues where broad scientific consensus exists and downweights issues primarily driven by demonstrably false factual claims. The platform also maintains a public, auditable fact-checking layer for all issues on the active ballot. This does not prevent misinformation — nothing does entirely — but it significantly reduces its ability to drive the planetary agenda.

7.4 "Who guards the guardians?"

This is the most important objection and the one to which The Planet's Vote's entire technical architecture is the answer. The platform guards itself through radical transparency. Every algorithmic decision is auditable. Every vote is cryptographically verifiable. Every line of code is open source. Every funding transaction is publicly recorded. The Algorithm Audit Committee, the The Planet's Vote Foundation board, and the Planetary Coordination Council are all subject to recall votes and public accountability mechanisms. No single actor — including the platform's founders — has unilateral control over any element of the system.

7.5 "This has been tried before and failed"

Previous attempts at global democratic governance have failed for three reasons: they were not genuinely democratic (they represented governments, not people), they lacked the technological infrastructure for direct participation at scale, and they were designed as all-or-nothing replacements for the existing nation-state system rather than as complementary layers. The Planet's Vote addresses all three failures: it is direct democracy, it is built on 21st-century

cryptographic infrastructure, and it is explicitly designed to complement rather than replace existing institutions.

Conclusion: The Necessity of The Planet's Vote

There is a version of the future in which humanity continues to be governed by 195 separate nation-states, each making decisions based on short electoral cycles and narrow national interest, while the planetary threats that do not respect those nations accumulate toward catastrophe. In that version of the future, the question is not whether a supervolcanic eruption or asteroid impact will occur — it is only when, and whether we will have built the coordination mechanisms to respond.

There is another version of the future. In that version, humanity looked at the tools available to it — the internet, cryptography, mobile communication, artificial intelligence, the accumulated wisdom of democratic theory — and built something new. Not a world government in the sense of a global authority over all human affairs. Something more modest and more powerful: a mechanism through which the people of Earth, speaking together for the first time in history, expressed their collective will on the decisions that determine whether they survive.

The Planet's Vote is that mechanism. It is technically feasible. It is politically achievable. It is philosophically justified. And given the threats that face this civilisation, it is arguably the most important infrastructure project of the 21st century.

The question is not whether such a platform should exist. The question is whether the people who understand the necessity will act before the necessity becomes catastrophe.

We invite every governance scholar, cryptographer, democratic theorist, jurist, technologist, and concerned citizen to join this effort. The Planet's Vote belongs to humanity. Its development must reflect that from the first day.

Appendix A: Glossary of Key Terms

Term	Definition
Supermajority	A voting threshold of 66.7% (two-thirds) of participating voters required for any standard resolution to pass under The Planet's Vote.
Zero-Knowledge Proof	A cryptographic method allowing one party to prove a statement is true without revealing any information beyond the truth of the statement itself.
Self-Sovereign Identity (SSI)	An identity model in which individuals control their own digital credentials without reliance on centralised authorities.
Decentralised Identifier (DID)	A type of globally unique identifier anchored to a public blockchain, controlled by the individual, not by any registrar.
Homomorphic Encryption	Encryption that allows computation on encrypted data without decrypting it, enabling vote tallying without exposing individual ballots.
Quarterly Voting Cycle	The quarterly voting cycle used by The Planet's Vote. Votes are held up to four times per year, triggered when a minimum of two ratified questions reach the signal threshold.
Emergency Override Protocol	The Planet's Vote's mechanism for opening a crisis vote within 6 hours of a verified planetary-class threat, bypassing the standard quarterly schedule.
Shadow Vote	A fully functional but non-legally-binding The Planet's Vote vote, used to build voter base, demonstrate platform capability, and generate political mandates during the pre-treaty phase.
Planetary Coordination Council	The 17-member (plus Secretary-General) executive body of The Planet's Vote, elected by regional supermajority, responsible for implementing passed resolutions.
Trending Algorithm	The Planet's Vote's open-source, publicly auditable system for reviewing proposed questions, confirming scientific ratification, and surfacing those with the highest signal counts to the quarterly ballot.

Appendix B: Relevant Existing Institutions and Frameworks

Institution / Framework	Relevance to The Planet's Vote
UN Office for Outer Space Affairs (UNOOSA)	Primary UN body for space governance. Natural partner for planetary defense mandate implementation.
International Asteroid Warning Network (IAWN)	Existing voluntary coordination network for NEO threat assessment. Provides technical infrastructure The Planet's Vote can mandate funding for.
Space Mission Planning Advisory Group (SMPAG)	Coordinates international response planning for NEO threats. Requires binding authority that The Planet's Vote can provide.
W3C Decentralised Identifier Working Group	Develops open standards for DID infrastructure. Critical technical partner for The Planet's Vote identity layer.
Antarctic Treaty System (1959)	Proof of concept for cooperative international governance of a global common. Demonstrates feasibility of sovereignty-sharing on planetary issues.
Nuclear Non-Proliferation Treaty (1968)	Model for binding international agreement on an existential risk category. Template for The Planet's Vote's treaty pathway.
EU eIDAS 2.0 Framework	European digital identity standard. Relevant to The Planet's Vote identity layer design for European participants.
IPCC (Intergovernmental Panel on Climate Change)	Scientific consensus body whose findings should feed directly into The Planet's Vote's algorithm for climate-related issues.
Internet Governance Forum (IGF)	UN forum on internet governance. Potential venue for early The Planet's Vote legitimacy-building engagement.

Appendix C: Recommended Reading and References

The following works inform the theoretical and technical foundations of The Planet's Vote:

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The Planet's Vote — The Planet's Vote

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To contribute to this initiative:

github.com/PlanetVote/PlanetVote

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*"The question is not whether such a platform should exist.
The question is whether the people who understand the necessity
will act before the necessity becomes catastrophe."*