DiAL.WTF

Secured & Monetized Communications

Phonebook

Peer-2-Peer, Wallet-to-Wallet, Monetized Multimedia Communication

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Abstract

The rapid expansion of decentralized finance and Web3 ecosystems has created a demand for native communication primitives that are secure, censorship-resistant, and economically aligned with users. Existing platforms—Discord, Telegram, and other Web2 intermediaries—fail to provide wallet-native identity, direct monetization, or on-chain trust guarantees, leaving communities vulnerable to spam, phishing, and central points of failure. **Dial.wtf introduces a wallet-to-wallet communication protocol** that transforms addresses into functional endpoints for peer-to-peer audio calls, paid messages, group interactions, and monetized "party line" broadcasts. By combining peer-to-peer networking (WebRTC/PeerJS), decentralized messaging (Matrix), programmable money flows (Superfluid, Unlock Protocol), and cross-chain interoperability (Wormhole, 0xSplits), Dial enables an entirely new layer of on-chain coordination. Its native utility token, $DIAL, underpins subscription tiers, per-use payments, referral incentives, and platform buybacks. We propose Dial as the **communication layer of Web3**, designed to scale from individual calls to global communities while preserving privacy, ownership, and economic alignment.

Introduction

Communication is the backbone of all networks. From the first telephone directories to modern messaging platforms, each era has defined new ways for people to

connect. In Web3, where wallets are the universal identity, there is still no native communication primitive. This gap leaves users dependent on centralized intermediaries that compromise privacy, ownership, and economic alignment.

Background

Communication has always been the foundation of networks. The very origins of the internet itself were bound to phonelines, carrying simple signals across copper wires. Early systems such as the telephone switchboards and the directories of Bell Labs demonstrated the first large-scale attempts to map identity to communication endpoints.

As technology evolved, so too did the mediums of communication. Radio and broadcast introduced one-to-many distribution, extending reach beyond the limits of direct connection. Instant messaging platforms like AIM, ICQ, and later MSN Messenger brought real-time, digital interaction to the masses. The rise of YouTube and other social platforms layered community and content discovery on top of messaging, blending communication with culture.

In Web2, centralized messengers such as Discord, Telegram, and WhatsApp became the de facto backbone of online communities. They provided speed and accessibility, but at the cost of ownership, privacy, and control. Identity remained tied to usernames, emails, or phone numbers — all controlled by corporate intermediaries.

Today, in Web3, wallets have become the universal account system. A wallet address is simultaneously an identifier, an access credential, and a store of value. Yet despite serving as the backbone of decentralized identity, wallets lack a native communication primitive. This gap leaves communities reliant on external, centralized messengers that are misaligned with the principles of decentralization.

Motivation

Despite the rapid growth of decentralized networks, communication in Web3 remains anchored in Web2 infrastructure. Communities organize on Discord servers,

investors coordinate on Telegram groups, and developers rely on Twitter threads or email lists. These platforms are fast and familiar, but they suffer from critical limitations: they are centralized, prone to censorship, vulnerable to phishing, and economically misaligned with the users they serve.

Wallets, by contrast, have become the universal account system of Web3. They secure billions in assets, serve as digital identities, and gate access to dApps and communities. Yet wallets cannot speak. There is no native mechanism for one address to call another, to leave a message, or to broadcast to a verified audience. This absence of wallet-to-wallet communication fragments communities and forces them to operate in insecure environments outside the trust boundaries of the chain.

The motivation for Dial.wtf arises directly from this gap. By treating wallets as communication endpoints, we enable a new primitive: peer-to-peer voice, messaging, and group interaction secured by cryptographic identity and powered by programmable money. Just as phone numbers transformed social coordination in the 20th century, wallet addresses can become the phone numbers of Web3.

The timing is critical. Layer-2 networks such as Base and Optimism, cross-chain protocols like Wormhole, and decide how messaging frameworks like Matrix have matured to the point where scalable, real-time wallet-native communication is feasible. Meanwhile, demand for secure coordination among DAOs, NFT communities, and DeFi protocols continues to grow. Dial aims to meet this demand by providing a communication layer that is private, censorship-resistant, and economically aligned with its users.

Design Principles

The architecture of Dial.wtf is guided by a set of design principles intended to ensure that communication in Web3 is private, user-owned, transferable, and economically aligned. These principles define both the scope of the system and the values that shape its evolution.

Wallets as Identity Primitives

In Web3, the wallet is more than a store of assets: it is the universal account system. Dial treats wallet addresses as first-class communication endpoints, equivalent to phone numbers in legacy networks. This removes reliance on centralized identifiers such as emails or usernames.

Peer-to-Peer by Default

Communication should be as direct as possible. Dial leverages peer-to-peer technologies to minimize intermediaries, reduce points of failure, and ensure that ownership of identity and conversation rests with the participants themselves.

Native Monetization

Economic alignment is integral to communication. Dial integrates programmable payments at the protocol layer—subscriptions, per-use fees, and streaming—so that creators, communities, and individuals can transact without intermediaries extracting disproportionate value.

Transferability and Hyper-Financialization

Accounts and their associated assets—such as rooms, tones, or access rights—are not static. In Dial, they are fully transferable, fractionalizable, and billable. This principle extends communication into an **economic substrate** where every interaction, room, or feature can be packaged, priced, leased, or traded. By treating communication assets as liquid financial instruments, Dial enables a hyper-financialized ecosystem of ownership and monetization.

Composability with Web3 Infrastructure

Rather than reinventing existing primitives, Dial is designed to integrate with the broader Web3 ecosystem. Protocols such as Unlock, Superfluid, Wormhole, and 0xSplits extend Dial's functionality while maintaining modularity and interoperability.

Privacy and Security as Defaults

Centralized messengers expose communities to spam, phishing, and surveillance. Dial prioritizes encryption, anti-spam mechanics, and cryptographic verification,

ensuring that users can communicate in an environment aligned with the principles of decentralization.

User-Centric Economics

Value should accrue to the users and communities that generate network effects—not to a central platform. Dial's design ensures that incentives are distributed fairly through tokens, referrals, and activity-based rewards.

Seamless User Experience

Decentralization must not come at the cost of usability. Dial abstracts complexity so that communication feels as seamless as legacy calling and messaging, while preserving the trust guarantees of Web3.

Contributions

This paper makes the following contributions:

1. **Wallet-to-Wallet Communication Primitive** — We formalize the concept of treating wallet addresses as functional communication endpoints, enabling peer-to-peer calls, messages, and group interactions secured by cryptographic identity.
2. **Integrated Architecture** — We present a hybrid architecture that combines peer-to-peer networking (WebRTC/PeerJS), decentralized messaging (Matrix), programmable money (Unlock Protocol, Superfluid), and cross-chain interoperability (Wormhole, 0xSplits).
3. **Economic Layer** — We define $DIAL as the native utility token for communication, supporting subscription tiers, per-use billing, referral incentives, and platform buybacks.
4. **Hyper-Financialized Accounts** — We extend communication beyond usage into assetization, allowing accounts, rooms, and features to be transferable, tradable, and billable.
5. **Comparative Analysis** — We differentiate Dial from existing systems such as XMTP, Lens, Status, Discord, and Telegram, highlighting its wallet-native design and composable monetization model.

6. **Proposal for Web3 Infrastructure** — We propose Dial as a foundational communication layer for the Web3 stack, analogous to how Ethereum defined decentralized computation.

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The remainder of this paper is structured as follows.

- **Section 2** outlines the limitations of existing communication systems and the specific problems faced by Web3 communities.
- **Section 3** introduces the Dial.wtf solution, presenting wallet-to-wallet calls and monetized audio as new communication primitives.
- **Section 4** describes the system architecture, including the application features, technical stack, and privacy guarantees.
- **Section 5** details the tokenomics of $DIAL, including supply, allocation, incentives, and vesting mechanisms.
- **Section 6** explains the economic model, focusing on revenue categories, pricing, and network effects.
- **Section 7** provides implementation details, current progress, and the development roadmap.
- **Section 8** discusses risks, mitigations, and related work.
- **Section 9** concludes with a vision for Dial as the communication layer of Web3.
- **Appendices** include a glossary, references, and legal disclaimers.

Problem

Despite the growth of decentralized networks, communication in Web3 remains bound to centralized infrastructure. Users, developers, and communities rely on Discord servers, Telegram groups, Twitter threads, and other Web2 platforms to coordinate. While these systems provide reach and familiarity, they also introduce structural weaknesses that are incompatible with decentralized ecosystems.

Centralized Dependence

Current communication is controlled by corporate intermediaries. Platforms can censor, throttle, or deplatform communities without recourse. Governance decisions are opaque, and user data is often monetized in ways that conflict with the interests of the communities generating it.

Identity Limitations

In Web2 messengers, accounts are tied to phone numbers, emails, or platform-specific usernames. These identifiers are fragile, easily spoofed, and siloed. In Web3, wallets have emerged as the universal identity primitive, yet they remain disconnected from day-to-day communication. This forces users to fragment their digital lives across incompatible systems.

Security and Spam

Scams, phishing attempts, and impersonation are endemic on centralized messengers. Without cryptographic verification, users have no reliable way to confirm who they are speaking to. Communities must rely on moderators and manual verification processes that do not scale, leaving members exposed to constant risk.

Lack of Native Monetization

Communication platforms extract value through advertising or subscription models, but they rarely provide native tools for communities to directly monetize their interactions. There is no wallet-native way to charge for calls, sell access to group conversations, or share in revenue generated by participation. This leaves creators and organizers dependent on external business models that dilute ownership.

Fragmentation

Web3 communities are scattered across Discord servers, Telegram channels, and Twitter feeds. None of these platforms integrate with on-chain activity or trust guarantees. As a result, coordination occurs outside of the very systems that communities rely on for governance, asset management, and identity, creating inefficiency and risk.

Solution

To address the limitations of centralized messengers, Dial.wtf introduces a wallet-native communication protocol that treats blockchain addresses as first-class communication endpoints. By making wallets functionally equivalent to phone numbers, Dial establishes a new primitive for secure, private, and monetizable interaction in Web3.

Wallet-to-Wallet Communication

Dial enables users to call, message, and broadcast directly from one wallet to another. Every interaction is tied to cryptographic identity, eliminating spoofing and impersonation while preserving the pseudonymity inherent to blockchain addresses.

Native Economic Alignment

Unlike Web2 platforms that monetize users through advertising, Dial integrates programmable payments into the communication layer itself. Calls, messages, and rooms can be priced on a per-use or subscription basis, with revenues flowing directly to users, communities, or shared treasuries. Unlock Protocol, Superfluid, and 0xSplits allow these flows to be granular, composable, and transparent.

Transferable and Financialized Accounts

In Dial, accounts and their associated assets—such as rooms, tones, and access rights—are fully transferable and billable. This extends communication beyond utility into financial infrastructure, where interaction rights can be packaged, leased, or traded. Communities gain the ability to design their own economic systems around communication itself.

Composable Architecture

Dial is not a closed platform, but a composable layer in the Web3 stack. It integrates peer-to-peer networking (WebRTC/PeerJS), decentralized messaging (Matrix), programmable money (Unlock, Superfluid), and cross-chain interoperability (Wormhole). This modularity ensures that Dial can evolve with the broader ecosystem and interoperate with emerging protocols.

Privacy and Security

End-to-end encryption, spam prevention, and wallet-based verification are embedded by default. Users maintain ownership of their identity and data while gaining the ability to interact across networks without reliance on centralized intermediaries.

The Communication Layer of Web3

Just as Ethereum defined decentralized computation, Dial proposes a decentralized communication layer. By uniting identity, privacy, and monetization in a single framework, Dial provides the missing substrate for communities, DAOs, creators, and individuals to coordinate natively on-chain.

Architecture

Dial.wtf is implemented as a modular communication layer that combines peer-to-peer networking, decentralized messaging, programmable payments, and cross-chain interoperability. The following subsections detail the system design.

5.1 System Overview

Dial maps wallet addresses to communication endpoints. When one user initiates a call or message, the request is routed peer-to-peer using **WebRTC/PeerJS**, with **Matrix** providing decentralized messaging and room management.
 Payment flows—per-call, per-message, or subscription-based—are enforced on-chain through **Unlock Protocol**, **Superfluid**, and **0xSplits** for programmable revenue distribution. **Wormhole** or **LayerZero** ensures cross-chain operability so communication is not siloed to one network.


5.2 Application Features

- **Wallet-to-Wallet Calls** — Real-time audio connections secured by wallet signatures.
- **Paid Messaging** — Encrypted DMs and group chats with optional pay-to-send/pay-to-read mechanics.
- **Party Lines** — Multi-user audio rooms that can be free, gated, or monetized, supporting creators and communities.
- **Voicemail** — An on-chain inbox for asynchronous audio or text messages.
- **Address Book** — A contact layer derived from wallet interactions and referrals.
- **NFT Dial Tones & Skins** — Customizable and tradable communication assets, creating new financial primitives.


5.3 Technical Stack

- **Networking** → WebRTC / PeerJS for low-latency P2P calls.
- **Messaging** → Matrix protocol for decentralized chat and room state.

- **Payments** → Unlock Protocol (subscriptions), Superfluid (streaming payments), Request Network (in-message invoicing), 0xSplits (automated revenue distribution).
- **Cross-Chain** → Wormhole for bridging tokens and communication across ecosystems (Base, Solana, others).
- **Identity** → Wallet signatures for authentication, with optional ENS or identity overlays.
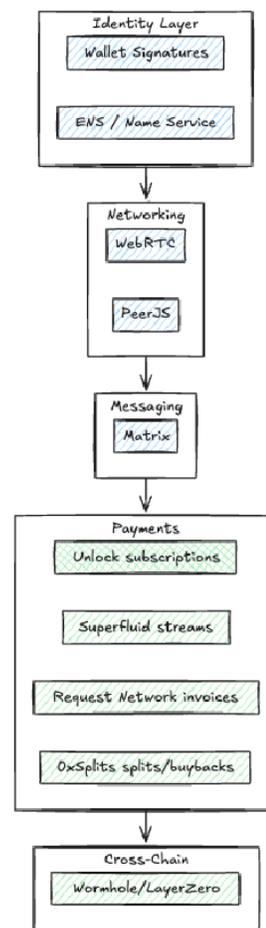
5.4 Security and Privacy

- **End-to-End Encryption** — Calls and messages are encrypted by default.
- **Spam Prevention** — Paid message gating, referral-based invites, staking mechanisms to limit unsolicited contact.
- **Identity Verification** — Wallet signatures provide cryptographic assurance of sender authenticity.
- **Data Ownership** — Conversations are not centrally stored; users maintain custody of communication history.
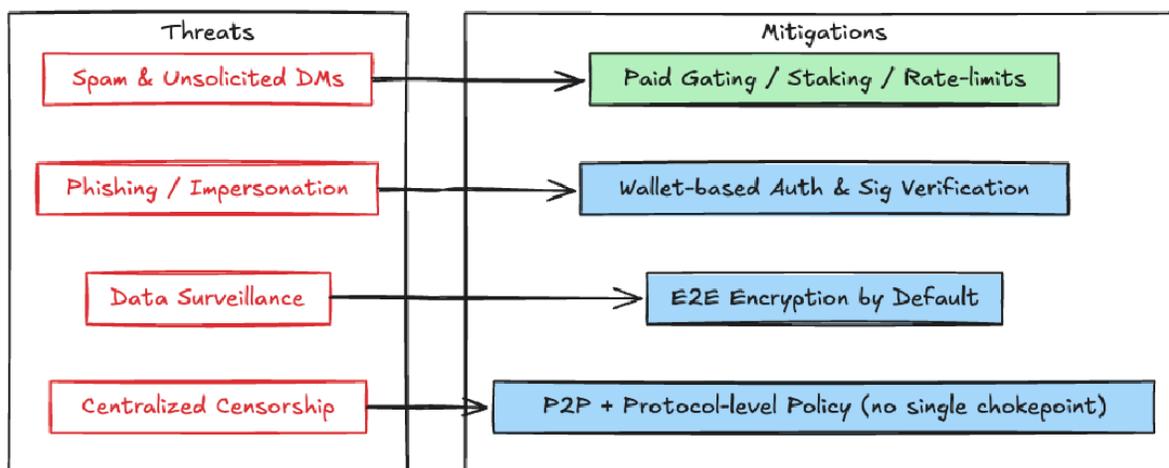
Tokenomics

The $DIAL token is the native utility and coordination asset of the Dial.wtf protocol. It underpins subscriptions, per-use payments, referral incentives, and platform buybacks. This section outlines its supply, allocation, utility, and vesting model.

6.1 Supply and Allocation

- **Total Supply:** 100,000,000 $DIAL (fixed, non-inflationary).
- **Genesis Pre-Sale:** 5.5% sold at $0.09 per token ($500,000 raised).
- **Seed Sale:** $1.0M–$1.5M target raise at $0.15 per token (market cap ~$15M).
- **Allocation Model (illustrative):**
  - Community Incentives: **17%** (17,000,000 $DIAL)
  - Team & Advisors: **25%** (25,000,000 $DIAL)
  - Token Purchasers (Pre-seed, Seed, Strategic): **25%** (25,000,000 $DIAL)
  - Treasury & Operations: **25%** (25,000,000 $DIAL)
  - Partnerships & Ecosystem Grants: **8%** (10,000,000 $DIAL)

$DIAL Token Allocation

Team & Advisors: 25% (25,000,000 $DIAL)
Token Purchasers (Pre-seed, Seed, Strategic): 25% (25,000,000 $DIAL)
Treasury & Operations: 25% (25,000,000 $DIAL)
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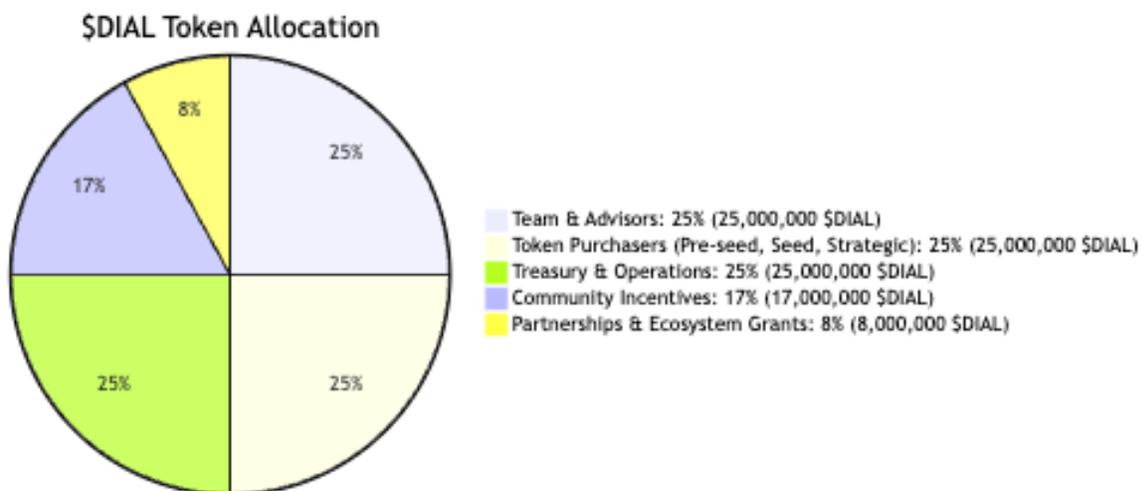
6.2 Utility and Incentives

- **Subscriptions** — $DIAL is used to purchase and manage subscription tiers (Pro, Business, Ultra), managed via Unlock Protocol.
- **Per-Use Payments** — Calls, messages, or party line access can be billed in $DIAL.
- **Streaming** — Real-time payment flows for ongoing calls or sessions via Superfluid.
- **Revenue Splits** — Automated community or creator payouts via 0xSplits.
- **Referral Rewards** — $DIAL is distributed for verified referrals and viral loops.
- **NFT Assets** — Dial tones, skins, and rooms priced in $DIAL and tradable on secondary markets.
- **Buybacks** — A portion of protocol fees are routed to purchase $DIAL from the market, supporting long-term sustainability.

6.3 Vesting and Distribution

- **Pre-Seed Purchasers** — 5% unlocked 180 days post-TGE, 95% vesting linearly over 180 days.
- **Seed Purchasers** — Same schedule unless negotiated otherwise.
- **Team & Advisors** — 12-month cliff, followed by linear vesting over 24–36 months.
- **Community Incentives** — Distributed over multiple years via staking, rewards, and referral programs.
- **Treasury** — Controlled by governance with transparent disbursements.

Economic Model

The Dial protocol introduces a new category of economic activity: **communication as a financial primitive**. Where Web2 platforms monetize users indirectly through advertising or extractive subscriptions, Dial embeds monetization directly into the communication process. Every interaction—whether a call, message, or room—is capable of carrying value. This ensures that the system is **self-sustaining, scalable, and aligned with its users.**

7.1 Revenue Categories

- **Category 0: Freemium Users**
  Users can access basic functionality such as joining open rooms, receiving calls, or viewing community broadcasts. While they do not contribute direct revenue, they play a critical role in network growth. Freemium participation also serves as an onboarding funnel, converting users into Category 1 and 2 over time.
- **Category 1: Subscribers**
  Subscription tiers purchased via Unlock Protocol provide predictable, recurring revenue. These tiers may unlock:
    - Expanded address book size.
    - Enhanced privacy and spam filters.
    - AI-driven call transcription and analytics.
    - Access to premium rooms or events.

  Subscriptions are designed to blend **utility and status**, incentivizing users to upgrade both for functionality and reputation.

- **Category 2: Pay-Per-Use Participants**
  The majority of revenue is expected from per-use payments. Examples include:

○ Sending encrypted direct messages with attached fees.
  ○ Paying to unmute in a party line.
  ○ Gated access to premium calls, broadcasts, or content drops.
  ○ On-chain tipping and microtransactions during calls.

These transactions leverage the **granularity of programmable money**, allowing communication to be billed at the level of seconds, words, or interactions.

- **Category 3: Escrowed / Yield-Bearing Communication**
Unique to Dial, this category captures value from delayed communication claims.
  ○ When a sender attaches payment to a message, the funds are held in a protocol-managed vault until the recipient reads or accepts it.
  ○ While idle, these funds are deployed into integrated yield protocols (e.g., Aave, Morpho).
  ○ The recipient receives their full original payment upon claim.
  ○ The yield accrued during the holding period flows to the Dial protocol as revenue.
    This model transforms idle communication capital into an always-on yield engine, ensuring that even unclaimed messages generate value for the ecosystem.
  ○ For advertisers, this model creates an additional layer of economic efficiency: campaigns can fund user attention **without wasting capital while waiting**. Every unclaimed impression or unopened message continues to generate yield for the network until it is eventually consumed.

7.2 Pricing Model

- **Dynamic Pricing**
  Users and communities can set their own rates for calls, rooms, and access,

creating a marketplace for attention and interaction. A high-demand address (e.g., a DAO founder or influencer) may charge more for messages or calls, while smaller communities can remain free or low-cost.

- **Streaming Payments**
  Voice calls and live rooms use **per-minute billing** via Superfluid, allowing costs to scale with usage. This model mirrors legacy phone minutes but adds composability: revenue splits, community treasuries, or referral bounties can all be applied in real time.
- **NFT-Based Assets**
  Communication assets—such as tones, access passes, or themed rooms—are minted as NFTs. These NFTs can be priced dynamically, transferred, leased, or resold. This introduces **secondary markets** where value accrues not just from usage, but from ownership.

7.3 Platform Fee Schedule & Incentives

Protocol Fee Schedule

All revenue flows—whether from subscriptions, per-use interactions, or NFT sales—are routed through a **protocol-level fee schedule contract**. This ensures the platform captures value consistently while remaining adaptable.

- **Dynamic Splits** — Dial can adjust the split (e.g., 80/20, 70/30, 95/5) depending on service type or growth stage.
- **Service-Specific Rates** — Calls, rooms, and advertising may each have tailored fee percentages.
- **Protocol Revenue** — The protocol's cut is automatically routed into buybacks, ecosystem incentives, and treasury reserves.

Incentive Emissions

To accelerate growth, Dial uses **performance-based emissions** denominated in "minutes," which can be claimed for $DIAL.

- **Earned by Actions** — Hosting monetized calls, onboarding users, and other productive activities generate minutes.
- **Claimable Rewards** — Minutes are periodically redeemable for $DIAL, ensuring emissions stay aligned with productive use.
- **Emission Discipline** — Rewards are weighted toward the actions that most directly grow protocol revenue, ensuring sustainability.

7.4 Network Effects

- **Metcalfe's Law** — As more wallets join, the potential number of interactions grows quadratically, rapidly compounding network value.
- **Referral Rewards** — Verified referrals distribute $DIAL to users who onboard others, creating viral adoption loops.
- **Creator Economies** — As creators monetize their rooms, content, or presence, they attract audiences who become paying users.
- **Financial Gravity** — Protocol-level buybacks link adoption directly to $DIAL demand, reinforcing token value.

7.5 Differentiation from Web2 Models

Unlike Discord or Telegram, where communities are dependent on centralized infrastructure and advertising-driven economics, Dial enables:

- **Direct Monetization** — Users and communities capture the value of their interactions.
- **Programmable Alignment** — Fees, subscriptions, and splits are transparent and customizable.
- **Assetization of Communication** — Accounts, rooms, and tones become **financial instruments**, tradable and billable across networks.

7.6 Example Scenarios

Example 1: A Monetized Call
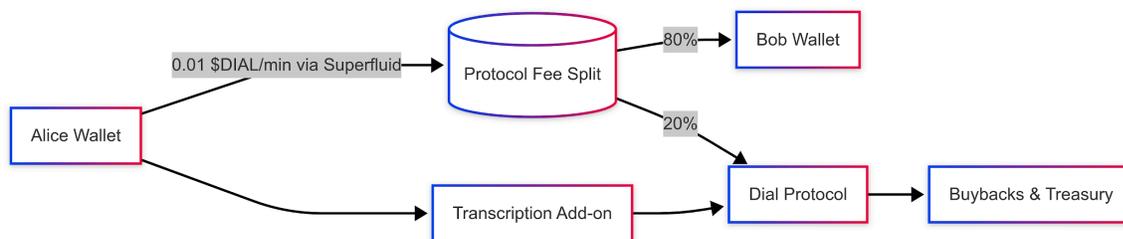
Alice is a DAO contributor who wants to consult with Bob, a recognized expert in governance design. Instead of scheduling a traditional call over Discord or Zoom, Alice initiates a **wallet-to-wallet call** using Dial.

1. **Call Initiation**
   - Alice dials Bob's ENS address (`bobdao.eth`).
   - Bob has set a rate of **0.01 $DIAL per minute** for incoming calls.
2. **Payment Stream**
   - As the call begins, a **Superfluid stream** starts flowing from Alice's wallet.
   - Payments occur **per second**, ensuring Alice only pays for the exact time she uses.

3. **Protocol-Level Fee Split**
   - The Dial protocol automatically applies a **split contract**:

- 80% of revenue goes directly to Bob.
- 20% is routed through the protocol's **0xSplits contract**, which handles:
  - Protocol fee collection.
  - Automatic buybacks of $DIAL.
  - Allocations to partner treasuries if applicable.

4. Bob does not configure this — it's **protocol-enforced**, ensuring that Dial always captures its share of the value generated.

5. **Call Features**
   - Alice opts into **automatic transcription**, billed at **0.002 $DIAL per minute**.
   - The transcript is tied to Alice's wallet history and can be stored privately or financialized as an NFT.

6. **Post-Call Settlement**
   - Alice speaks with Bob for 30 minutes, totaling **0.30 $DIAL** paid.
   - Distribution:
     - 0.24 $DIAL → Bob
     - 0.06 $DIAL → Protocol fee split (buybacks, ecosystem allocation)
   - Transcript adds 0.06 $DIAL, bringing the **total spend to 0.36 $DIAL**.

7. **Assetization**
   - Alice's call log and transcript are tied to her wallet history.
   - If desired, she could **resell access** to the transcript as an NFT for DAO members, transforming the call into a financialized communication asset.

Example 2: Escrowed Paid Message
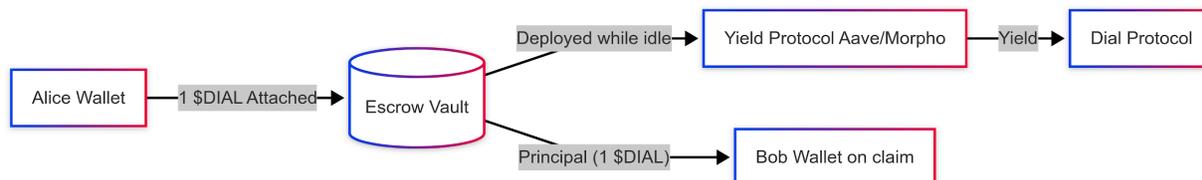
1. **Message Creation**
   - Alice wants to send Bob an encrypted message.
   - To ensure delivery and priority, she attaches **1 $DIAL** to the message.
2. **Escrow Vault**
   - The payment is locked in a **protocol-managed vault contract.**
   - Until Bob opens the message, the funds remain unclaimed.
3. **Yield Generation**
   - While idle, the 1 $DIAL is routed into an integrated yield protocol (e.g., Aave, Morpho).
   - Bob is guaranteed his **full 1 $DIAL**, regardless of when he claims.
   - The **interest accrued during the holding period** flows to the Dial protocol as revenue.
4. **Claim Event**
   - Bob opens the message 60 days later.
   - He receives his **1 $DIAL in full.**
   - Dial retains the yield accrued during the two-month delay, reinforcing protocol sustainability.
5. **Assetization**
   - Alice may choose to wrap the message in an NFT for proof of delivery, reselling access or bundling it into DAO archives.

Example 3: Monetized Party Line
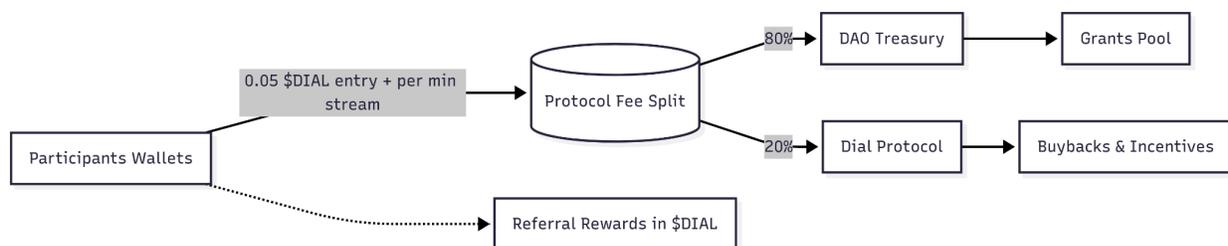
1. **Room Setup**
   - A DAO launches a live "governance town hall" as a **party line room.**
   - Entry costs **0.05 $DIAL per participant.**

- Additional actions (e.g., "unmute mic" or "request to speak") cost **0.01 $DIAL each.**.

2. **Payment Flow**
    - Payments stream per minute using **Superfluid**.
    - The Dial protocol enforces the platform fee split (e.g., 80% to the DAO treasury, 20% to Dial).
    - Treasury funds can be routed directly into the DAO's multisig.

3. **Composability**
    - The DAO configures the room so 5% of revenue automatically funds a grants pool.
    - A referral campaign rewards attendees who bring in new listeners, distributing $DIAL earned from the room fees.

4. **Post-Event Settlement**
    - 500 participants attend for an average of 30 minutes.
    - Total fees collected: **750 $DIAL.**
    - Distribution:
        i. 600 $DIAL → DAO Treasury
        ii. 150 $DIAL → Dial protocol (buybacks + ecosystem allocation)

5. **Assetization**
    - The event transcript and audio archive are tokenized as an NFT, sold later as part of the DAO's cultural record.

Example 4: Advertiser-Funded Communication
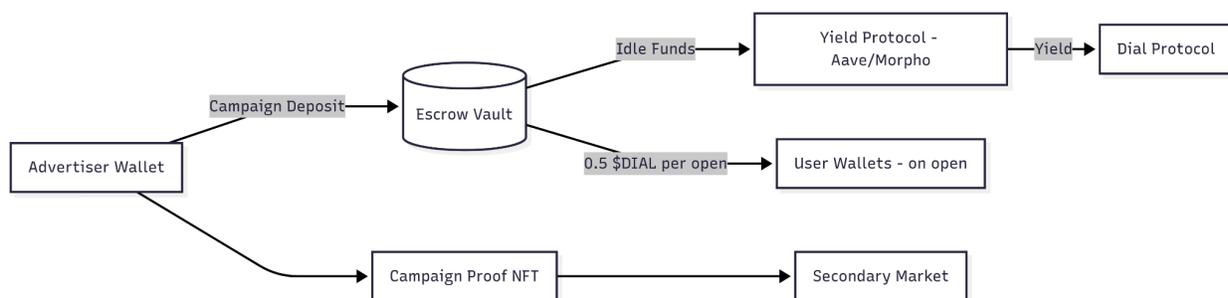
1. **Campaign Setup**

- A DeFi protocol wants to promote its new yield product to governance DAO members.
- It launches a sponsored message campaign targeting wallets that previously interacted with governance contracts.
- Each sponsored message includes **0.50 $DIAL** attached as an incentive for the recipient to open and read it.

2. **Escrow Vault**
   - The advertiser deposits the campaign budget (e.g., 10,000 messages × 0.50 $DIAL = 5,000 $DIAL).
   - Funds are locked in a **protocol-managed vault.**

3. **Yield Generation**
   - While unopened, the escrowed funds are deployed into a yield protocol (e.g., Aave, Morpho).
   - The **principal remains untouched**, guaranteeing that recipients receive their promised 0.50 $DIAL when they open the message.
   - The **interest generated during the idle period** accrues to the Dial protocol.

4. **Claim Event**
   - When a recipient opens the message, their **0.50 $DIAL** is instantly released.
   - Dial has already captured the yield generated during the delay, turning unopened impressions into protocol revenue.

5. **Post-Campaign Settlement**
   - Suppose only 7,500 of the 10,000 sponsored messages are opened within 90 days.
   - Recipients collectively claim **3,750 $DIAL.**
   - The remaining 1,250 $DIAL stays in escrow until claimed or expires per campaign rules.
   - Yield generated across the entire campaign flows directly to Dial, creating **non-dilutive revenue** from advertiser activity.

6. **Assetization**
   - The advertiser can mint campaign proof as an NFT (showing reach, open rates, and yield contributed to the protocol), providing transparency and a secondary market for verified ad campaigns.

7. **Escrow Vault**
   - The advertiser deposits the campaign budget (e.g., 10,000 messages × 0.50 $DIAL = 5,000 $DIAL).
   - Funds are locked in a **protocol-managed vault.**

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8. Implementation

The Dial protocol is being developed in staged releases, progressing from a working alpha toward full decentralization and integration with external protocols. This section describes the current state of implementation, the roadmap for near-term development, and areas of future research and expansion.

8.1 Current Progress

- **Core Protocol** — Wallet-to-wallet audio calling is live in alpha, powered by **PeerJS/WebRTC** for peer-to-peer communication. Calls are secured by wallet signatures to ensure authenticity.
- **Messaging Layer** — **Matrix SDK** is integrated for decentralized messaging, supporting direct messages, group chats, and room persistence. Early spam-mitigation features (paid gating, referral-based access) are in testing.
- **Payments** — Prototype support for **Unlock Protocol** (subscription tiers) and **Superfluid** (streaming payments) has been implemented. Calls and party lines can be billed on a per-minute basis.
- **Front-End App** — The Dial mobile app (iOS) supports wallet connection via RainbowKit, direct calls, and early versions of the address book, profile, and referral system.
- **Infrastructure** — A Matrix-based backend is containerized for deployment, with scaling experiments conducted on BitLaunch VPS. Wormhole integration for cross-chain token settlement is in progress.

- **Token Economics** — $DIAL genesis pre-sale completed ($495K raised). Tokenomics and vesting contracts drafted, with governance hooks reserved for future stages.

8.2 Roadmap

Short Term (0–6 months)

- Launch of **invite-only staging app** at dial.wtf.
- Expanded feature rollout: voicemails, party lines, paid DMs, referral engine.
- Implementation of the **Fee Schedule Contract** to enforce protocol-level splits (e.g., 80/20).
- Deployment of **NFT dial tones & skins** marketplace.
- **Public launch** with subscription tiers (Unlock Protocol).
- Expansion of **Superfluid streaming** to support per-second billing for calls and live rooms.

Medium Term (6–18 months)

- Closed beta for **advertiser-funded communications** (escrowed yield model)
- Governance-controlled **buybacks** and incentive emissions ("minutes → claimable $DIAL").
- Cross-chain messaging and payments fully integrated via **Wormhole**.
- DAO onboarding: first major communities hosting governance calls and monetized rooms.

Long Term (18+ months)

- Full support for **account abstraction** (ERC-6551 / NFT wallets) where communication rights and rooms can be tokenized, transferred, and fractionalized.
- **Zero-Knowledge Enhancements** for private caller identity, message proof-of-delivery, and encrypted transcripts.

- Deeper integrations with **DeFi protocols** for yield-bearing escrow vaults.
- **Protocol decentralization**: community governance of fee schedule, emissions, and treasury allocations.
- Ecosystem growth: third-party developers building apps and extensions on top of Dial.

Dial.wtf Roadmap
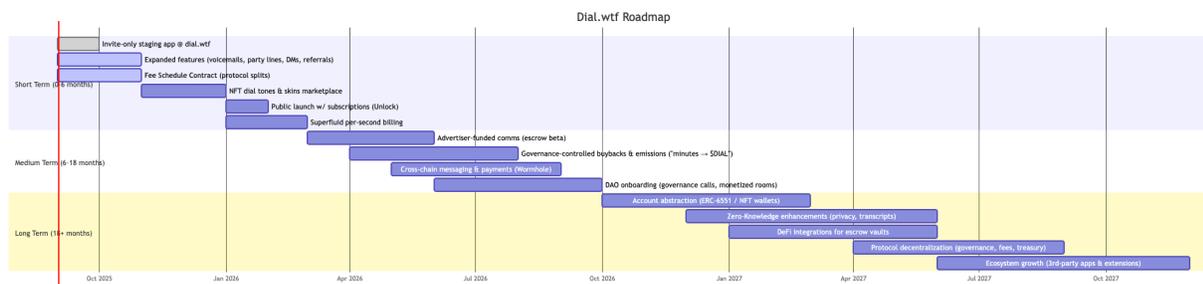
8.3 Future Work

- **Hyper-Financialization of Communication Assets** — Exploration of secondary markets for rooms, tones, transcripts, and referral rights.
- **AI-Powered Services** — On-chain transcription, translation, and summarization billed per-use. Potential integrations with decentralized AI inference providers.
- **Advertiser Economy** — Yield-bearing escrow campaigns scaled for brands and protocols, with NFTs as proof of reach.
- **DAO & Enterprise Adoption** — Features tailored for decentralized governance (delegated call permissions, treasury-linked party lines) and enterprise compliance (auditable logs, encrypted archives).
- **Research into New Primitives** — Combining Dial's communication layer with reputation systems, identity graphs, and cross-protocol coordination tools to build the foundation for **Web3-native social infrastructure.**

9. Risks & Mitigations

As with any emerging protocol, Dial faces a range of risks spanning technical execution, regulatory environments, adoption dynamics, and competitive pressures. In this section we outline these risks transparently, along with the mitigations designed into the system to minimize their impact.

9.1 Technical Risks

Scalability

Real-time peer-to-peer audio and group communication introduce challenges at scale. High concurrent usage may strain networking and message routing, especially when layered with encryption and payment verification.

Mitigation: Dial's architecture leverages **WebRTC/PeerJS** for peer-to-peer calls and **Matrix** for decentralized room management, both of which are proven at scale in other contexts. Infrastructure is containerized, enabling dynamic scaling. Performance bottlenecks will be addressed through staged rollouts, stress testing, and progressive decentralization.

Interoperability

Cross-chain settlement via Wormhole/LayerZero and multi-protocol payments (Unlock, Superfluid, 0xSplits) introduce integration complexity and potential attack surfaces.

Mitigation: Cross-chain functionality is staged, starting with single-network deployment (Base), before extending to Solana and others. Each integration undergoes external audits, with fallbacks ensuring graceful degradation in the event of bridge disruption.

Security

Wallet-based authentication reduces identity spoofing but creates new vectors,

including signature replay, phishing, and spam flooding. Protocol-level contracts (fee schedule, vaults, emissions) also represent potential exploit targets.

Mitigation: **End-to-end encryption** is default, combined with wallet-signature verification for sender authenticity. Spam is deterred by **paid message gating**, **staking requirements**, and **referral-only invites.** Core contracts undergo security audits and are deployed incrementally with kill switches in early stages.

9.2 Regulatory Risks

Communications Regulation
As a protocol enabling voice and messaging, Dial may be perceived as overlapping with telecommunications regulation, particularly if adoption grows into mainstream use.

Mitigation: Dial is positioned as **infrastructure, not a service provider.** Calls and messages are wallet-to-wallet, with no central carrier. Legal entities provide operational clarity, while governance decentralization reduces regulatory choke points over time.

Token Classification
The $DIAL token, used for payments and incentives, may be scrutinized as a security in some jurisdictions. This could limit exchange access or investor participation.

Mitigation: $DIAL is structured as a **utility token** underpinning protocol operations (payments, referrals, NFTs). Participation is restricted in blocked jurisdictions, with disclaimers and SAFT frameworks used in fundraising. Governance decentralization will further distance the protocol from issuer dependence.

Dial operates at the intersection of communications, payments, and decentralized finance. Our unique business model exposes Dial to a diverse set of legal and regulatory challenges. These risks span **telecommunications, securities law,**

financial regulation, data privacy, intellectual property, consumer protection, and governance. While global frameworks remain unsettled — particularly around DeFi, token classification, and cross-border banking — Dial recognizes that investor and user confidence depends on a proactive, well-documented compliance posture. To mitigate these risks, Dial will adopt **robust internal compliance policies** (covering AML/KYC, sanctions screening, privacy, consumer protection, intellectual property, and governance), secure **appropriate insurance coverage** (e.g., directors & officers, cyber liability, IP infringement), and engage external legal and compliance advisors. These safeguards position Dial not only to comply with current laws but also to adapt as regulatory standards evolve across jurisdictions.

1. Communications Regulation

Because Dial enables wallet-to-wallet voice and messaging, regulators may attempt to apply traditional telecommunications laws (e.g., FCC in the U.S., Ofcom in the U.K., or EU directives). These frameworks often impose carrier obligations such as licensing, lawful intercept, or emergency call routing.

- **Risk:** If regulators view Dial as equivalent to a telecom provider, the project could face compliance burdens or restrictions.
- **Mitigation:** Dial operates as a **protocol layer** rather than a carrier. No central operator manages call data; instead, communications are peer-to-peer and cryptographically secured. To further reduce regulatory pressure, Dial will (i) decentralize governance, (ii) clarify in legal terms that it is infrastructure, not a service provider, and (iii) establish compliant legal entities only where strictly necessary for developer support or treasury functions.

2. Token Classification

The $DIAL token powers payments, incentives, and governance. Tokens are subject to inconsistent global regulatory treatment. In the U.S., for instance, securities regulators may view $DIAL as an "investment contract," while other jurisdictions may classify it as a payment token, exchange token, or even e-money.

- **Risk:** Classification as a security could restrict exchange listings, liquidity, and participation by U.S. or other investors. It may also trigger disclosure and registration obligations.
- **Mitigation:** $DIAL is designed as a **utility token** with core functions—payments, referrals, NFT access, and protocol participation. Measures include:
    - Restricting sales in blocked jurisdictions.
    - Using **SAFT frameworks** for fundraising.
    - Publishing disclaimers clarifying non-investment intent.
    - Phasing toward **DAO-style governance**, distancing token operation from any centralized issuer.

3. Data Privacy and Content Regulation

Voice and messaging functions may trigger obligations under global privacy frameworks such as the EU's GDPR, the ePrivacy Directive, and emerging AI/content regulations. In the United States, California law sets the most stringent baseline through the California Consumer Privacy Act (CCPA), as amended by the California Privacy Rights Act (CPRA), and the California Age-Appropriate Design Code Act for child-directed services.

Risk: Even if Dial does not centrally store content, regulators may apply privacy and content obligations to platforms that enable user-generated communications. These may include:

Data subject rights (access, deletion, portability) under GDPR/CCPA.

Opt-out of data sales/sharing requirements under CPRA.

Child protection standards under COPPA (federal) and California's Age-Appropriate Design Code.

Content takedown or harmful speech rules in certain jurisdictions (e.g., EU Digital Services Act).

Liability exposure if third-party analytics, AI moderation, or metadata are deemed "personal data."

Mitigation:

Minimal Data Retention: Wallet-to-wallet calls are designed to be ephemeral, encrypted, and never stored on central servers. This architecture sharply reduces exposure to data subject rights requests and breach risks.

Privacy-by-Design Policies: Internal compliance policies align with GDPR and CCPA/CPRA principles (purpose limitation, data minimization, transparency). Where metadata (e.g., wallet addresses, timestamps) is processed, users are informed and controls (opt-outs, disclosures) are built in.

Child Safety Protocols: The protocol is not marketed to children, and ecosystem partners must comply with COPPA and California's Age-Appropriate Design Code if they offer child-facing services. Geofencing and disclaimers reinforce these restrictions.

Decentralized Moderation: Governance frameworks can adopt community-based content moderation tools (e.g., flagging, DAO-approved standards) instead of centralized censorship, demonstrating proactive safeguards while aligning with decentralization principles.

Vendor Due Diligence: Any third-party compliance, analytics, or hosting providers are contractually required to meet GDPR/CCPA standards, ensuring end-to-end protection.

4. Financial & Payments Regulation

Because $DIAL functions as a medium of exchange for protocol payments (e.g., call fees, incentives, or event access), regulators may attempt to classify the protocol within existing **financial and securities law frameworks**.

- **Risk:**
  - **Money Transmission & Licensing:** In the U.S., projects that transmit value may be deemed **money services businesses (MSBs)**, triggering federal registration and **money transmitter license (MTL)** obligations at the state level. Similar licensing regimes exist in Asia and other jurisdictions.
  - **Securities Regulation:** Tokens risk classification as securities under the **Howey test** (U.S.) or similar tests abroad, which would restrict listings, require costly registration, or subject the project to enforcement.
  - **EU MiCA Framework:** Europe's new **Markets in Crypto-Assets Regulation (MiCA)** creates strict requirements for stablecoins and utility tokens. Notably, **USDT has been restricted in the EU** under MiCA's stablecoin provisions, underscoring regulatory pressure on non-compliant assets.
  - **DeFi & Banking Uncertainty:** Globally, regulators are still debating how decentralized protocols fit within existing **banking and financial intermediation laws**. Offering payment or credit-like features without a license could expose participants to enforcement until clearer rules emerge.
- **Mitigation:**
  - **Utility Token Design:** $DIAL is structured primarily as a **utility token**, underpinning protocol operations (payments, referrals, NFTs, governance), not as an investment product.
  - **No Banking or Custody Functions:** Dial does not hold deposits, make loans, or operate custodial wallets — distancing the protocol from banking regulation triggers.
  - **Regulatory Monitoring:** The foundation/DAO actively tracks evolving laws (e.g., MiCA, U.S. SEC and CFTC guidance, Asia-Pacific licensing regimes) and adapts compliance posture accordingly.

- ○ **Positive U.S. Momentum:** Recent U.S. legislative proposals show a trend toward **clearer paths for token classification and DeFi innovation**, reducing long-term uncertainty. Dial aims to align with emerging best practices rather than exploit loopholes.
- ○ **Fundraising Compliance:** Early fundraising is conducted through **SAFTs** and restricted to compliant jurisdictions, with investor disclosures clarifying utility-token status.

5. Compliance & Risk Management

Although Dial is designed as a decentralized, non-custodial protocol, the ecosystem recognizes the importance of meeting global compliance expectations, particularly around **anti-money laundering (AML)**, **counter-terrorist financing (CTF)**, and **sanctions enforcement**.

- **Risk:** Without appropriate safeguards, regulators could view Dial as vulnerable to misuse by sanctioned individuals, politically exposed persons (PEPs), or illicit actors, exposing the project and its users to reputational and regulatory consequences.
- **Mitigation:**
  - ○ **Third-Party Compliance Partners:** Dial integrates with established compliance providers for real-time monitoring and identity checks, including **PEP screening, sanctions list screening (OFAC, UN, EU, etc.), adverse media monitoring, and transaction risk scoring**.
  - ○ **Robust Internal Policies:** Dial's operating entities adopt and maintain **comprehensive internal policies and procedures** aligned with industry standards. These include:
    - ■ **AML/KYC Policy:** Defining risk-based customer due diligence requirements where fiat, token sales, or regulated counterparties are involved.
    - ■ **Sanctions Policy:** Ensuring screening at both onboarding and ongoing monitoring levels.
    - ■ **Recordkeeping & Reporting Procedures:** Establishing logs, incident response processes, and escalation channels for suspicious activity.

- - ■ **Governance Oversight:** A designated **compliance officer** (or committee) within the DAO/foundation supervises vendor selection, monitors compliance performance, and updates policies in response to regulatory changes.
  - **Modular Access Controls:** Compliance layers apply at critical points—on/off-ramps, DAO treasury management, fundraising—without undermining wallet-to-wallet privacy for general users.
  - **Education & Transparency:** User-facing disclosures highlight compliance responsibilities, while internal reporting ensures accountability to regulators, partners, and token holders.

6. Illicit Use & Liability

Any open communications protocol carries the risk of misuse. Bad actors may attempt to use Dial for **fraud, scams, disinformation, harassment, or even illicit coordination** (e.g., kidnapping, terrorist financing, or organized crime).

- **Risk:**
  - Regulators or courts could attempt to hold the Dial ecosystem liable for facilitating harmful or unlawful communications.
  - Exchanges and partners may be reluctant to engage if the protocol is perceived as a hub for scams or disturbing content.
  - Reputational damage could slow adoption if Dial is linked to high-profile incidents of abuse.
- **Mitigation:**
  - **Protocol Neutrality:** Dial is a **decentralized infrastructure layer**, comparable to TCP/IP or Ethereum itself. Calls are **wallet-to-wallet and encrypted**, with no central operator monitoring or controlling communications. This architecture reduces liability by design, as no central entity has editorial control.
  - **Legal Shielding:** Operating entities will adopt **Terms of Use** and **disclaimers** clarifying that illicit use is strictly prohibited and that the

protocol is provided "as infrastructure." Liability rests with users, not the developers or DAO.

- ○ **Community & Governance Controls:** DAO governance can deploy **community moderation tools**, flagging mechanisms, and open-source safety modules to discourage abuse while avoiding centralized censorship.
- ○ **Compliance Partner Integration:** By working with **third-party compliance providers** for PEP/sanctions checks, Dial limits access points for known high-risk individuals or jurisdictions.
- ○ **Lawful Cooperation Policy:** While Dial does not surveil user activity, ecosystem partners (e.g., front-end apps, token sale participants) may cooperate with lawful investigations under their jurisdiction, consistent with due process.
- ○ **Education & Transparency:** Users are clearly informed that they remain responsible for lawful activity and that misuse may expose them to criminal liability and permanent exclusion from ecosystem features.

7. Intellectual Property & Branding Risks

- **Risk:** Protocol code, branding, or interfaces may infringe third-party rights, leading to IP disputes. Conversely, open-source contributors may claim ownership over Dial's codebase.
- **Mitigation:** Code released under clear open-source licenses, proactive trademark registration for Dial brand, contributor agreements assigning rights to the foundation/DAO.

8. Consumer Protection & Platform Liability

- **Risk:** Authorities may apply **consumer protection laws** (FTC in the U.S., EU consumer directives, California Unfair Competition Law) to voice services, especially around scams, harassment, or unfair practices. Victims of fraud via the platform could attempt to hold Dial liable.
- **Mitigation:** Clear disclaimers of protocol neutrality, terms of service with **Prohibited Uses**, and governance-driven adoption of **community moderation tools**.

9. Taxation & Reporting

- **Risk:** Tax treatment of $DIAL tokens varies — they may be treated as income, capital gains, or even as a "payment instrument." In some jurisdictions, DAOs/foundations may be responsible for transaction-level reporting or withholding.
- **Mitigation:** No custody of funds (reduces withholding obligations), disclaimers that users must comply with local tax laws, DAO treasury structured with professional tax counsel.

10. Employment & Labor Law (if contributors are incentivized in tokens)

- **Risk:** Regulators may view token rewards for contributors as **compensation**, triggering wage, labor, and benefits obligations.
- **Mitigation:** Structure contributor incentives as **independent contractor grants** with clear terms; decentralize contributions through DAO bounties instead of employment relationships.

11. DAO Governance & Fiduciary Risk

- **Risk:** As governance decentralizes, disputes could arise over fiduciary duties, treasury mismanagement, or voting manipulation. Regulators could treat DAO participants as "general partners" with liability exposure.
- **Mitigation:** Clear DAO governance documents, limited-liability wrapper entities (foundation, LLC, or association), conflict-of-interest policies, and dispute resolution mechanisms (e.g., arbitration clauses).

9.3 Adoption Risks

User Onboarding
Wallet-based onboarding can be a barrier for non-crypto users unfamiliar with private key management.

Mitigation: Dial integrates **RainbowKit** for seamless wallet connection and will support **Web2-friendly logins** (e.g., MagicLink) in parallel. Referral systems, airdropped minutes, and UX simplification will reduce friction.

Network Effects

Dial requires a sufficient density of users and communities for communication to have value. Without adoption, the network risks fragmentation.

Mitigation: Growth is seeded through **referral rewards**, **incentive emissions**, and **partnerships** with DAOs, creators, and Layer-2 ecosystems (Base, ApeChain). Adoption is staged, beginning with closed betas for high-engagement communities before broad release.

9.4 Competitive Risks

Web3 Protocols

Projects such as XMTP, Lens, and Status are also pursuing decentralized messaging primitives.

Mitigation: Dial differentiates by embedding **economic alignment and financialization directly into communication.** Category 3 (escrowed yield-bearing communication), protocol-level fee schedules, and NFT-based assets distinguish Dial from purely messaging-centric approaches.

Web2 Platforms

Discord, Telegram, and Signal dominate community coordination but rely on centralized infrastructure and advertising-driven models.

Mitigation: Dial offers a **wallet-native, monetizable alternative** that turns communication itself into a billable, transferable asset class. By aligning economics with users, rather than extractive platforms, Dial creates incentives for migration over time.

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10. Related Work

Several protocols and platforms have attempted to address decentralized communication or provide messaging layers for Web3 communities. While these efforts inform the space, none fully integrate economic alignment, transferability, and communication-as-a-financial-primitive in the way Dial proposes.

10.1 Web3 Protocols

XMTP (Extensible Message Transport Protocol)

- Provides wallet-to-wallet messaging using decentralized storage.
- Strong for encrypted text-based messaging, with integrations into wallets and dApps.
- **Limitations:** Focused on asynchronous text, limited monetization primitives, no real-time voice or financialization of communication assets.

Lens Protocol

- A decentralized social graph for Web3-native social networks.
- Strength: composability for social interactions, identity connections, and content.
- **Limitations:** Lens emphasizes social media feeds, not synchronous communication or direct monetization of calls/messages.

Status

- A Web3-native messenger + wallet + browser.
- Strong focus on censorship resistance, open source ethos.
- **Limitations:** Single application, not a composable protocol; monetization features limited; low adoption compared to mainstream messengers.

10.2 Web2 Platforms

Discord

- Dominant community coordination platform in crypto.
- Strength: feature-rich, real-time audio and video, massive user base.
- **Limitations:** Centralized, vulnerable to scams, no wallet integration, monetization accrues to platform rather than users.

Telegram

- Popular for crypto communities, lightweight and accessible.
- Strength: encryption options, wide adoption, bot ecosystems.
- **Limitations:** Centralized, spam-heavy, no on-chain verification, limited monetization tools for communities.

Signal

- Secure, end-to-end encrypted messenger.
- Strength: gold standard for private text and calls.
- **Limitations:** No wallet integration, not composable with Web3, no native monetization.

10.3 Distinguishing Features of Dial

- **Communication as a Financial Primitive** — Dial uniquely embeds monetization into the communication layer itself, transforming calls, messages, and rooms into billable and transferable assets.

- **Escrowed Yield-Bearing Messages (Category 3)** — No other protocol financializes idle communication capital by capturing yield while messages await claim.
- **Protocol Fee Schedule** — Enforced at the smart contract level, ensuring sustainable revenue capture (e.g., 80/20 splits) and flexible adjustment by governance.
- **NFT Communication Assets** — Dial tones, rooms, and transcripts as NFTs extend communication into tradable, composable digital goods.
- **Cross-Chain Composability** — Dial integrates multiple protocols (Unlock, Superfluid, 0xSplits, Wormhole/LayerZero, Matrix) into a modular architecture.

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11. Conclusion

Communication has always been the foundation of networks, from telephone directories to social media platforms. Yet in Web3, where wallets serve as the universal identity, there remains no native communication primitive. Communities are forced to coordinate on centralized messengers that undermine privacy, ownership, and economic alignment.

Dial introduces a new paradigm: **wallet-to-wallet communication as a financial primitive.** By embedding monetization, programmability, and composability directly into the act of communication, Dial transforms calls, messages, and rooms into assets that can be billed, transferred, and traded. Through the integration of peer-to-peer networking, decentralized messaging, programmable payments, and cross-chain interoperability, Dial provides the missing substrate for communities, DAOs, creators, and individuals to interact natively on-chain.

The $DIAL token underpins this ecosystem, aligning incentives across subscriptions, per-use payments, yield-bearing escrow, and protocol-level buybacks. Its design ensures that value accrues to the users and communities that generate network effects, not to extractive intermediaries.

As outlined in this paper, the Dial protocol is already advancing toward implementation, with an invite-only staging app, alpha features, and a clear roadmap for progressive decentralization. Risks remain, but they are met with credible mitigations in architecture, regulation, adoption, and competition.

We propose Dial as the **communication layer of Web3** — the missing link that unites identity, coordination, and economic alignment. Just as Ethereum established decentralized computation, Dial aspires to establish decentralized communication: private, composable, and economically sustainable at global scale.

12. Appendices

12.1 Glossary

- **Wallet-to-Wallet (W2W):** Direct interaction between blockchain addresses, secured by cryptographic signatures.
- **Party Line:** A multi-user audio room within Dial, monetizable through entry fees, per-minute billing, or NFT access.
- **Superfluid:** A protocol enabling real-time streaming payments on-chain.
- **Unlock Protocol:** A protocol for tokenized subscription models.
- **0xSplits:** A protocol for programmable revenue splits and buybacks.
- **Wormhole:** A cross-chain interoperability protocol for token and message bridging.
- **LayerZero:** An interoperability protocol enabling lightweight cross-chain messaging and composability across ecosystems.
- **Matrix:** An open-source decentralized messaging protocol for chat and room management.
- **Fee Schedule Contract:** A smart contract that enforces protocol-level fee splits (e.g., 80/20 between user and protocol).
- **Minutes:** Performance-based emissions in Dial, redeemable for $DIAL, earned through revenue-generating actions.

- **Escrowed / Yield-Bearing Communication:** A payment-attached message or interaction where funds are locked until claimed, with yield captured by the protocol during idle periods.
- **Request Network:** A decentralized protocol for on-chain invoicing and payment requests, enabling native settlement and accounting.

12.2 References

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