

# INTR Token Economy

Working Paper v0.2

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Kintsugi Labs

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# 1. Introduction: Interlay, interBTC and Kintsugi

## 1.1 Definitions

**Interlay Network.** Interlay is a decentralized network dedicated to connecting crypto-currencies like Bitcoin with DeFi platforms like Polkadot and Ethereum. The Interlay network is hosted as a Polkadot parachain and will be connected to Cosmos, Ethereum and other major DeFi networks.

**interBTC** is Interlay's flagship product - Bitcoin on any blockchain. A 1:1 Bitcoin-backed asset, fully collateralized, interoperable, and censorship-resistant. interBTC will be hosted as a Polkadot parachain and connected to Cosmos, Ethereum and other major DeFi networks.

**INTR** is interBTC's governance token, distributed across network participants and used to elect council members and vote on proposals. INTR will be used to govern the interBTC parachain on Polkadot.

**Kintsugi** is Interlay's canary network for interBTC, a testnet with real economic value deployed on Kusama (Polkadot's canary network). Kintsugi and interBTC share the same code base - with the difference that Kintsugi will be 2-3 releases ahead of interBTC with more experimental features.

**kBTC** is a 1:1 Bitcoin-backed asset on the Kintsugi canary network, deployed on Kusama. It follows the same design as interBTC, yet may feature more experimental functions and parameterizations.

**KINT** is Kintsugi's governance token, the Kusama counterpart to INTR.

**XCLAIM** is the protocol underlying interBTC and interBTC. XCLAIM was invented in 2018, and published as a top-tier, peer-reviewed scientific paper by Interlay founders. You can read the paper [here](#).

**Kintsugi Labs** is a non-profit oriented organization responsible for the Interlay and Kintsugi launches, whose mission is to support the development and growth of the decentralized network.

## 2. Why Does Interlay Need a Token Model?

- **Self-Governance by Risk Takers.** Interlay's vision is that Interlay is governed by its decentralized network of users from day 1. Vaults, interBTC users, developers and protocols integrating interBTC must be able to vote on system changes to protect their interests.
- **Liquidity Bootstrapping.** Vaults face capital costs from locking up insurance collateral to secure BTC. While Interlay's fee and collateral model provide competitive APY in the mid-term, a bootstrapping mechanism is needed to reward early liquidity and accelerate growth.

### 3. Key Functions of INTR

INTR is the native token of the Interlay parachain on Polkadot. It serves two main purposes:

- **Governance participation.** Make and vote on governance proposals, and elect council members to make day-to-day operational decisions. See [7. Governance](#) below for details.
- **Utility.** Interlay will also support transaction fee payments in INTR tokens, as well as other digital assets.

### 4. Supply and Emission Schedule

INTR has an **unlimited supply**. The emission schedule is defined as follows:

- **1 billion (1,000,000,000 )INTR over the first 4 years**
- **2% annual inflation afterwards, indefinitely.**

### 5. Minting and Distribution

INTR follows a **fair launch scheme**. INTR tokens are distributed to network participants, builders and early backers in two forms: airdrops and block-rewards. There will be no public sale or ICO.

Interlay will be governed by the community from day 1:

- **70% of the initial 4 year INTR supply is distributed to the community as airdrops and block rewards.**
- **20% of the initial 4 year INTR supply is airdropped to the Interlay team, and early backers, who funded initial development of the protocol - subject to lockup & vesting.**
- **10% of the initial 4 year INTR supply is airdropped to a Foundation Reserve, to be used for funding ecosystem growth and future development.**

**Starting in year 5, only the community receives new INTR from the annual inflation.** The Interlay team and (early) backers only receive a one-time airdrop from the initial 4 year token supply.

#### 5.1 Initial 4-Year Emission

Over the first 4 years INTR has a predefined emission of 1 billion units, distributed as detailed in the following.

##### Crowdloan #1 (10%)

INTR airdropped to the community at launch, using the public crowdloan voting data as distribution mechanism.

<b>Distribution</b>	Airdrop
<b>Emission</b>	One-time upon launch
<b>Vesting</b>	<ul style="list-style-type: none"> <li>• <b>30%</b> will be liquid at the time of the airdrop, the remaining</li> <li>• <b>70%</b> will be subject to linear vesting for the period of the 96-week parachain slot lease.</li> </ul>

### On-chain Treasury (25%)

The On-Chain Treasury is controlled by protocol governance, which can utilize funds as deemed necessary. These tokens are reserved for future crowdloan campaigns, LP rewards, ecosystem funding and a potential rainy day fund.

<b>Distribution</b>	Airdrop
<b>Emission</b>	One-time upon launch
<b>Vesting</b>	None

### Vault Block Rewards (30%)

Vaults receive INTR as fees for keeping BTC locked and providing the required insurance collateral in DOT and other assets. Early Vaults receive more rewards as they take up higher risk in terms of protocol maturity.

<b>Distribution</b>	Block reward
<b>Emission</b>	<ul style="list-style-type: none"> <li>• <b>First 4 years:</b> 30% of the initial INTR supply, emitted as follows: <ul style="list-style-type: none"> <li>○ <b>Year 1:</b> 12% of initial INTR supply (40% of 4 year Vault rewards)</li> <li>○ <b>Year 2:</b> 9% of initial INTR supply (70% of 4 year Vault rewards)</li> <li>○ <b>Year 3:</b> 6% of initial INTR supply (90% of 4 year Vault rewards)</li> <li>○ <b>Year 4:</b> 3% of initial INTR supply (100% of 4 year Vault rewards)</li> </ul> See below for an auxiliary visualization. </li> <li>• <b>Starting with year 5:</b> 40% of the annual inflation</li> </ul>
<b>Vesting</b>	None

### Why do Vaults receive INTR?

Vaults are the heart of the Interlay network. Vaults are network participants who ensure BTC remains locked on Bitcoin while interBTC exists - that is, they enforce the 1:1 peg to locked BTC. To prevent misbehavior, Vaults lock collateral (e.g. in DOT) with the parachain such that the collateral value always exceeds the value of the secured BTC. If a Vault misbehaves, their collateral is slashed and users reimbursed. Vaults take up liquidation risk as well: if the price of the collateral assets crashes compared to BTC, vaults may be liquidated and lose their collateral. Vaults hence receive INTR as reimbursement for their risk - and to ensure they can protect themselves against hostile governance takeovers. Anyone can become a Vault, anytime.

### Stake-to-Vote (5%)

To participate in on-chain governance, INTR holders must lock their tokens with the parachain. The longer INTR are locked, the more voting power they have. See [7. Governance](#) for more details on Stake-to-Vote. As reward for locking INTR and participating in governance, network participants receive INTR block rewards, proportional to their share of the total locked INTR for voting.

<b>Distribution</b>	Block reward
<b>Emission</b>	<ul style="list-style-type: none"><li>• First 4 years: linear (25% of initial INTR supply / year)</li><li>• After 4 years: 5% of the annual inflation</li></ul>
<b>Vesting</b>	None

### Team & Early Investors (20%)

The Interlay team's (current and future members) token share, including an allocation to Interlay's Seed round investors, who funded early development.

<b>Distribution</b>	Airdrop
<b>Emission</b>	One-time upon launch
<b>Vesting</b>	48 week lockup, followed by 144 week linear vesting period (i.e., 0.5 lease period lockup, then 1.5 lease periods linear vesting)

### Foundation Reserve (10%)

A reserve to be used for funding ecosystem growth and future development.

<b>Distribution</b>	Airdrop
<b>Emission</b>	One-time upon launch
<b>Vesting</b>	To be defined for each individual spend

## 5.2 Annual Inflation Starting Year 5

After exactly 4 years and the full distribution of the initial supply of 1 billion INTR, the protocol will initiate a 2% annual inflation that will continue indefinitely.

Thereby, the newly minted INTR will be distributed fully among the community.

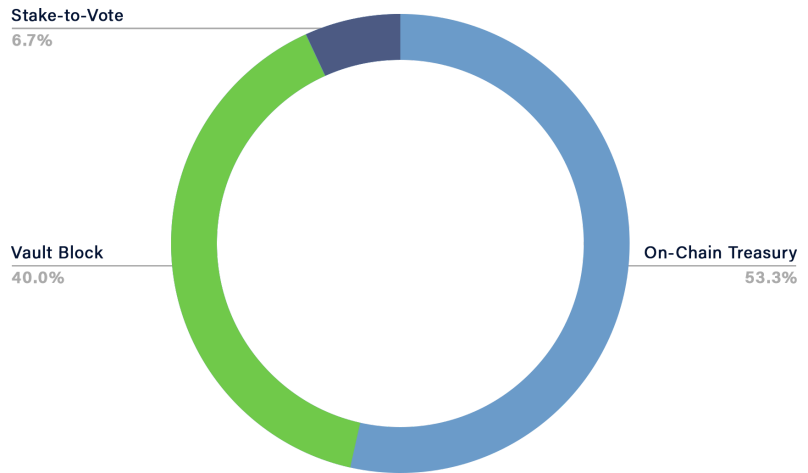


Figure 4: Distribution of 2% annual inflation among the Interlay community starting with year 5.

## 6. Crowdloans and Launch

Interlay will participate in the Polkadot parachain auctions and support a crowdloan to enable the community to vote:

- **Target slot: 6 - 10**
- **Lease duration: 96 weeks (maximum lease duration, periods 7 - 14)**
- **Max. lockup target: 50,000,000 hard cap (21,000,000 soft cap if clear leader)**

Interlay will use the crowdloan as a mechanism to airdrop INTR to the community to achieve decentralization right at launch.

- **10% of the initial 4-year INTR supply (100 million INTR) will be airdropped for the first crowdloan.**

### 6.1 Crowdloan Airdrop Distribution (10%)

The protocol will airdrop 10% of the initial 4-year INTR supply (100 million INTR) to crowdloan participants.

#### Vesting

The crowdloan vesting schedule is thereby as follows:

- **30% of the INTR airdropped to crowdloan participants are transferable right away,**
- **The remaining 70% are subject to linear vesting over the 96-week parachain lease period.**

## Hard Facts

Auction start	23 December 2021
Crowdloan start	~ 15 December 2021 (depends on Polkadot governance)
Parachain go-live (if winner)	11 March 2022 (same for all)
Target slot	6 - 11 (Batch 2)
Parachain lease period / DOT lockup	96 weeks
Crowdloan airdrop	10% of the initial 4-year supply (100,000,000 INTR)
Vesting	30% available when transfers are enabled. 70% vests linearly over 96 weeks
Airdrop distribution	Proportional
Crowdloan cap	21,000,000 DOT soft cap if clear leader (50,000,000 DOT hard cap)

## Bonuses

Bonus	%	Condition
Early bird	10%	Contribute before start of Auction #6 (23 December)
Challenges	2.5% 2.5%	Solve Interlay quiz ( <a href="#">try now</a> ) Mint interBTC on testnet ( <a href="#">try now</a> ) - MUST use same account!
Referral program	5%	of base reward per referred DOT
Kintsugi Legends	2.5%	If you contributed to Kintsugi crowdloan (MUST use same account!)



Strong supporters	10%	Contribute more than 50,000 DOT
To be confirmed: kBTC user bonus	tbc	Mint kBTC and/or run a Vault with collateral. Will be announced ad-hoc!

## 7. Governance

Interlay adopts [Polkadot's governance mechanism](#), with two modifications: (1) optimistic governance and (2) stake-to-vote.

More details on Interlay's governance process will be released soon, taking into consideration learnings from [Kintsugi's model](#).