

KRYONIS SOVEREIGN SYSTEMS LIMITED

# **BAIN Governance**

## and Standardization

*Intellectual Property Framework*

*Consortium Migration, Standards Body Structure, and Open Licensing Path*

Biological Computing Control Standard (BCCS) — Document 05

Version 2.0 | April 2026

[kryonislabs.org](http://kryonislabs.org) | [bccs.bio](http://bccs.bio)

## 1. Introduction

The BAIN ID system is designed as a reference standard for biological asset identification — analogous to ISIN for securities or ISO 6346 for shipping containers. A reference standard intended for multi-jurisdictional adoption cannot remain indefinitely under single-entity control.

This document specifies the governance roadmap: how intellectual property is managed during the foundational phase, how governance transitions to a multi-stakeholder consortium, what the standards body structure looks like, and how open licensing enables adoption without creating dependency on KRYONIS.

*The principle is straightforward: KRYONIS builds the standard. The standard outlives KRYONIS.*

## 2. Current Intellectual Property Ownership

During the foundational phase, all BCCS intellectual property is owned by KRYONIS Sovereign Systems Limited, Hong Kong. This includes:

IP Asset	Scope	Status
<b>BAIN ID Specification</b>	21-character format, encoding rules, asset taxonomy, 8-state lifecycle	v2.0 published
<b>PoPS Methodology</b>	Three-tier verification, confidence scoring, slashing, dispute resolution	v2.0 published
<b>\$BCCS Economic Model</b>	Emission schedule, fee mechanics, staking, buy-and-distribute	v2.0 published
<b>Smart Contract Code</b>	ERC-20, ERC-721, oracle, emission contracts on Base	Source verified on BaseScan
<b>BCCS Protocol Brand</b>	BCCS name, BAIN ID name, visual identity, domain portfolio	Active

Single-entity ownership during the foundational phase is necessary for specification integrity, rapid iteration, and protection against premature governance capture. This ownership is explicitly temporary — bounded by transition triggers, not discretion.

## 3. Three-Phase Governance Model

### 3.1 Phase 1 — Founder-Controlled (Current)

All protocol and specification decisions made by the founder via Safe multisig. Taxonomy governance, registrar authorization, namespace control, and version control managed by KRYONIS. Justification: protocol is pre-mainnet, pre-revenue, pre-community. Premature governance introduces attack vectors including governance capture by mercenary capital.

### 3.2 Phase 2 — Validator Governance

Triggered when network exceeds 100 active validators and 6 months of mainnet operation. Governance transitions to validator voting model. Validators vote on: emission parameters, staking requirements, slashing conditions, BAIN ID schema changes, oracle methodology updates, and new asset class additions. Voting weight proportional to stake. One address = one vote (Sybil resistance via staking requirement).

### 3.3 Phase 3 — Consortium Governance

Triggered when network exceeds 500 active validators, 12 months of mainnet operation, and ecosystem grants distributed to 10+ independent projects. Governance transitions to full consortium model with independent legal entity.

Decision Type	Phase 1	Phase 2	Phase 3
<b>Emission parameters</b>	Founder	Validator vote	Consortium vote
<b>Fee structure</b>	Founder	Validator vote	Consortium vote
<b>BAIN ID schema</b>	Founder	Validator vote	Consortium + technical committee
<b>New asset classes</b>	Founder	Validator vote	Consortium + scientific advisory
<b>Treasury &gt; \$50K</b>	Founder	Validator vote	Consortium vote
<b>Protocol upgrades</b>	Founder	Signaling (off-chain)	On-chain binding vote
<b>Partnership approvals</b>	Founder	Signaling	Consortium vote

## 4. BAIN Standards Consortium (BSC)

The BSC is the target governance entity for the BAIN ID specification. It is established as an independent legal entity when Phase 3 transition triggers are met.

### 4.1 Structure

Body	Composition	Function
<b>Governing Board</b>	5–9 seats: validators, institutional adopters, KRYONIS (1 seat)	Strategic direction, budget approval, membership
<b>Technical Committee</b>	Domain experts in biology, remote sensing, blockchain	Specification maintenance, version control, new asset classes
<b>Scientific Advisory</b>	Academic researchers, environmental scientists	Verification methodology review, error rate analysis
<b>Registrar Council</b>	Accredited oracles and institutional data providers	Data quality standards, oracle accreditation criteria

### 4.2 KRYONIS Role Post-Transition

After consortium establishment, KRYONIS retains one seat on the Governing Board (not a controlling position), continues as a commercial infrastructure provider building on the open standard, maintains the bccs.bio protocol operations site, and contributes to specification development through the Technical Committee. KRYONIS does not retain veto power over specification changes after transition.

## 5. Open Licensing Framework

The BAIN ID specification is intended to become an open standard. The licensing model transitions through three stages:

Stage	License Type	Scope	Trigger
<b>Foundational</b>	Proprietary (KRYONIS)	All IP controlled by KRYONIS. Usage via protocol participation.	Current state
<b>Consortium</b>	RAND (Reasonable and Non-Discriminatory)	Licensed to consortium members. Reference implementation open-source.	BSC established
<b>Open Standard</b>	Royalty-free open license	Specification freely implementable. No licensing fees.	BSC vote + maturity criteria

*The transition to royalty-free open licensing is the long-term goal. A biological asset identification standard achieves maximum value when adoption is unrestricted. KRYONIS derives commercial value from protocol infrastructure operation, not specification licensing.*

## 6. Specification Versioning

The BAIN ID specification follows semantic versioning: Major.Minor (e.g., v2.0). Major versions indicate breaking changes (format modifications, state model changes). Minor versions indicate backward-compatible additions (new asset classes, new API endpoints). All versions are published with changelogs. Backward compatibility is maintained across minor versions.

Current specification: v2.0. Previous versions remain valid for existing BAIN IDs. No BAIN ID is ever invalidated by a specification update — identity is permanent.

## 7. Path to International Recognition

The long-term ambition is formal international recognition of the BAIN ID standard through relevant standards bodies. This path requires: demonstrated multi-jurisdictional adoption (BAIN IDs registered across 10+ countries), operational consortium governance (BSC functioning independently for 12+ months), published error rates and methodology validation, and institutional endorsement from environmental agencies or sovereign entities.

This is a multi-year trajectory. KRYONIS does not represent that international recognition is guaranteed or imminent. The protocol is designed so that the specification is useful with or without formal standards body endorsement.

## 8. Governance Transition Triggers

Each governance transition is triggered by measurable, on-chain verifiable criteria — not by calendar date or founder discretion:

Transition	Trigger Criteria	Verification
<b>Phase 1 → Phase 2</b>	100+ active validators, 6 months mainnet operation	On-chain validator count + block timestamps
<b>Phase 2 → Phase 3</b>	500+ validators, 12 months mainnet, 10+ independent grant recipients	On-chain metrics + grant distribution records
<b>BSC Formation</b>	Phase 3 active, founding members confirmed, legal entity incorporated	Corporate registry + signed charter
<b>Open Licensing</b>	BSC operational 12+ months, specification stable (no major version in 6 months), BSC vote	Version history + consortium vote record

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This document describes governance design intent, not current operational structure. Governance transitions are subject to measurable criteria being met. No guarantee is made regarding timelines for consortium formation or open licensing. This document does not constitute legal advice or a solicitation of investment.