

# THE ACTIVE DATA SECURITY CONCEPT

## A NEW MODEL FOR DATA-BACKED CAPITAL

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# EXECUTIVE SUMMARY

High-growth companies increasingly derive their value from data rather than physical assets. Yet while this data underpins performance, forecasting, and competitive advantage, it remains difficult for investors to verify, value, or rely upon as collateral. As a result, data-rich businesses often face higher capital costs and limited financing options despite holding valuable intangible assets.

The Active Data Security concept introduces a concept of a new framework for transforming proprietary data into a legally enforceable, verifiable, and economically productive asset. Built on the Isle of Man's Data Asset Foundations (DAF) initiative, the structure could enable data to function as fiduciary-grade collateral—capable of supporting capital raising while remaining actively monitored, governed, and protected.

This paper outlines how the Active Data Security could work in practice, setting out the legal architecture, operational safeguards, and commercial mechanisms that allow data to underpin investable securities. It demonstrates how this approach could potentially address long-standing trust gaps in private markets and establishes a new standard for financing in the data economy.

## THE VISION

High-growth companies often lack traditional physical assets such as factories or real estate, yet they possess immensely valuable intangible assets: proprietary data, algorithms, and performance logs. Historically, investors have treated these assets as black boxes—opaque, unverifiable, and impossible to liquidate.

## THE POTENTIAL SOLUTION

The Founder (for example, a consortium of banks, insurers, financial market infrastructure providers, or issuers themselves), utilising the Isle of Man's Data Asset Foundation (DAF), introduces the Active Data Security.

This structure transforms raw data from a static record into a dynamic, yield-generating financial asset that can act as fiduciary-grade collateral for capital raising.

# LEGAL ARCHITECTURE: THE DATA-BACKED SECURITY CONCEPT

## STEP 1: ASSET CREATION (THE DEDICATION)

**Mechanism:** The private issuer executes a Data Asset Dedication Instrument (a standardised dedication deed).

**Legal Effect:** This is not a simple data upload; it is a legal transfer of defined rights and permissions to the Foundation.

**Why it Works:** Once dedicated, the issuer cannot delete or manipulate the data. This “locks” the asset, addressing a core investor concern around data tampering or post-issuance manipulation.

## STEP 2: ASSET PERFECTION (THE PROPERTY RIGHT)

**Statutory Vesting:** Upon registration, the Bill vests a personal property right in the data asset.

**Commercial Impact:** This converts data from an abstract concept into identifiable legal property that can be valued, audited, and pledged as collateral. The asset can support a digital bond issued via platforms such as LSEG DMI, SIX Digital Exchange, an institutional DLT, or other private market infrastructure providers.

## STEP 3: DEFAULT AND LIQUIDATION (THE COLLATERAL FUNCTION)

**The Safety Net:** The Dedication Instrument can specify that, upon default, the Foundation must sell or transfer the data rights to an investor representative—allowing data to function in practice like physical collateral.

# THE CORE STRUCTURE: **THREE** **PILLARS OF VALUE**

Unlike traditional data storage, the Active Data Security would be built on three pillars that could ensure the asset is legally enforceable, operationally verified, and commercially viable. Potential scenario:

## **PILLAR 1: LEGAL ENFORCEABILITY**

The structure creates a functional, transferable asset rather than merely storing data.

- **The Data:** pre-determined, recurring feeds of proprietary logs
- **The Context:** schemas, software keys, and algorithms required to interpret the data
- **The Result:** in a default scenario, the asset remains usable, intelligible, and legally transferable—not a “zombie file”.

## **PILLAR 2: AUTOMATED VERIFICATION**

Trust is enforced through code rather than manual audit.

- **Continuous Updates:** the Dedication Instrument mandates ongoing data feeds
- **Automated Validation:** updates are checked against CDMC standards (e.g. controls 4, 6, 9)
- **The Watchdog:** the Data Asset Register acts as an immutable log; data failures or degradation automatically alert the Data Enforcer, who has statutory powers to intervene.

## **PILLAR 3: COMMERCIAL UTILITY**

The asset remains economically productive while held as collateral.

- **Active Licensing:** anonymised data can be licensed to non-competitive third parties (e.g. insurance modelling, research)
- **Data Dividends:** revenue can help service bond coupons and validate the asset’s value in real time.

# THE ENGINE: HOW THE DATA ASSET REGISTER WORKS

Component	Function	Value to Stakeholders
The Register	Statutory single source of truth.	Receives automated alerts and intervenes.
The Assurance	Semi-automated data governance.	Scale: enables frequent updates without rising audit costs.
The Enforcer	Receives automated alerts and intervenes.	Safety: protects asset value before degradation occurs.

## POTENTIAL OPERATIONAL SCENARIO: THE GREENTECH BOND

**The Issuer:** A GreenTech energy storage firm raising £50m to scale

**The Asset:** Five years of grid constrained and congestion data

**Ingestion (The Lockbox):** The firm establishes a DAF and executes the Dedication Instrument, depositing historical logs and the software keys required to interpret them.

**Valuation (The Market Test):** The Foundation secures a commercial licence with an insurer, establishing a verified revenue stream linked to the data.

**Issuance (The Capital):** A digital bond is issued via LSEG, SIX Digital Exchange, an institutional DLT, or another private market platform, with the data cited as secured collateral.

## SUMMARY OF POTENTIAL BENEFITS

**For Issuers:** converts static data into non-dilutive capital

**For Investors:** delivers a secured, transparent, and potentially yielding asset class

**For the Market:** establishes a new trust standard for valuing intangible assets

# THE ISLE OF MAN

A self-governing nation in the heart of the British Isles, the Isle of Man is renowned for its political stability, forward-looking regulation, and collaborative business environment. As home to one of the world's most agile digital economies, it is the ideal jurisdiction to pioneer the future of data.

## DIGITAL ISLE OF MAN

Digital Isle of Man is an Executive Agency within the Isle of Man Government, driving the Island's digital future by creating the environment for business success, shaping policy, and leading innovation. It empowers businesses to grow and lead globally, positioning the Isle of Man as a hub for digital excellence.

## EDM ASSOCIATION

To deliver the Data Asset Foundations initiative, Digital Isle of Man has partnered with the EDM Association – the world's leading global association for data management, standards and analytics. With more than 700 member organisations spanning financial services, technology, government, and numerous industries, the EDM Association sets the global standards for data best practices, governance, and value realisation.



# JOIN THE FUTURE OF THE DATA ECONOMY

This is your opportunity to shape global standards, pioneer new business models, and unlock the full commercial power of your data.



[www.digitalisleofman.com/data-asset-foundations](http://www.digitalisleofman.com/data-asset-foundations)



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## IMPORTANT DISCLAIMER

The strategies, structures, commercial models and functionality outlined in this document are hypothetical and illustrative and are intended to support discussion of potential Data Asset Foundation use cases in the context of the proposed Foundations (Amendment) Bill 2025 and associated programme in the Isle of Man. These measures are proposed only and remain subject to parliamentary approval, amendment and Royal Assent. Any operational mechanisms – including Data Governance Frameworks, controls, standards, assurance processes and any functional specifications for a Data Asset Register – remain in draft/development and may change materially as legislation, regulations, procurement and system design are finalised.

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