DECA4 GOVERNMENT SOLUTIONS · REAL ESTATE

Developing a *Next-Generation* Real Estate Ecosystem

A sovereign land register, tokenised title, and a regulated market, on infrastructure the government owns.

WHO WE ARE

Deca4 is a UAE-based government technology firm with decades of experience digitising real estate, building the systems of record behind property markets that serve millions of people.

TRUSTED BY GOVERNMENTS AND REGULATORS

TDRA
هيئة تنظيم الاتصالات والحكومة الرقمية
TELECOMMUNICATIONS AND DIGITAL GOVERNMENT REGULATORY AUTHORITY

حكومة رأس الخيمة
Government of Ras Al Khaimah

محاكم
DIFC COURTS

A blockchain registry that is *faster, safer and investable*

Putting sovereign property records on a blockchain does more than digitise paper. When every title becomes a Sovereign Registered Asset (SRA) on the state's own ledger, the whole system becomes more trusted, more efficient, and open to investment.

01

Trusted records

Every title sits on **one sovereign ledger**, tamper-proof and instantly provable. Ownership is certain, and fraud and disputes fall away.

02

Faster processes

Transfers that took **days of manual checks settle in a single step**. Lower cost, less delay, and far less room for error.

03

New investment

Verified on-chain title makes property **liquid and investable**, opening a whole asset class to domestic and global capital.

Move the register the state already owns on-chain*, and the same records become instantly provable, transferable in a single step, and open to investment.*

THE SHIFT

Everything moves on-chain, into *one unified wallet*

Today an owner's title, money and records sit in **separate systems**, joined only by paperwork. On-chain, they become tokens in a single **government-issued wallet**, part of the national digital identity, and a transfer becomes one sovereign transaction.

TODAY · OFF-CHAIN

Title deed
A paper certificate or PDF

Money
Held in the bank

Ownership record
A siloed government database

Separate systems. Every transfer is manual paperwork moving value between them.

MOVE ON-CHAIN

ON-CHAIN · ONE UNIFIED WALLET

Government Wallet
NATIONAL DIGITAL VAULT

TOKEN	TOKEN	TOKEN
Title deeds	Company shares	Money

One sovereign wallet holds every asset as a token. Transferring a token **executes a sovereign transaction**: the legal requirements are built into the token itself.

FOR THE CITIZEN

Hold	Transfer	Own
Every asset in one wallet	Buy or sell in one click	Title updates instantly

FOR THE ADMINISTRATION

No re-keying	Compliance	Register
One source of truth	Checked by the token	Updates automatically

OUR SOLUTION

A sovereign stack for *tokenised real estate*

The **Government** tokenises its land register on a **sovereign blockchain it owns**, and enacts a **Real Estate Tokenisation Regulatory Framework** that licenses private operators to run digital marketplaces on the national ledger.

Every transaction, primary issuance, secondary trade, fractional sale, mortgage origination, settles atomically in a **stablecoin pegged to the national currency**. One sovereign chain. One source of truth. One regulated venue.

> *Five layers, one vertically integrated stack, from the sovereign chain up to the licensed market.*

LAYER 5

Licensed Marketplace Applications

Consumer + professional access · regulated transaction layer

LAYER 4

Real Estate Tokenisation Regulatory Framework

Sovereign law for issuance, custody, and transfer of title

LAYER 3

National-Currency Stablecoin

On-chain settlement, fully backed and pegged

LAYER 2

Tokenised Land & Interim Register

Registered title deeds, and pre-title (off-plan) interests, on-chain

LAYER 1

Sovereign Blockchain

Government-owned foundation chain

Every title deed and pre-title deed *is a token*

NATIONAL
LAND REGISTRY

Title Deed

CERTIFICATE OF OWNERSHIP

TokenID 0x7f3a...e91

Title Deed No.	00412 / 2027	**Property Type**	Residential
Issue Date	14 / 03 / 2027	**Property Condition**	Constructed
Plot No.	402060177	**Area (sq m)**	600.54
Registered Owner		**Ownership Share**	100%

This title deed is electronically issued and does not require a signature or stamp. Any alteration renders it void. The registry entry and its on-chain token are updated in a single transaction; neither can move without the other.

The token **is** the deed, not a wrapper pointing at it. Every title is issued on the **sovereign chain** and carries a **TokenID**, so ownership, whole or fractional, always stays in step with the register.

Think of it as the original document versus a photocopy that merely references it. The register entry and the token are the same object: every transfer, split or pledge updates both in one transaction. No reconciliation, no second register, no gap between what the state records and what the market trades.

REGULATORY COMPARISON

A framework built on sovereign rails, *empowering government*

DUBAI LIVE — BENCHMARK	THE PROPOSED MODEL PROPOSED — SOVEREIGN
FRAMEWORK: Virtual Asset regime (VARA / ARVA)	**FRAMEWORK:** Real Estate Tokenisation Regulatory Framework
TOKEN BROKER-DEALER	
PRYPCO MINT — PRYPCO Mint **License:** VARA Cat 3A Broker-Dealer **Tech:** XRP Ledger (via Ctrl Alt)	LICENSED OPERATOR — Private Marketplace Operator **License:** Broker-Dealer licensed under the Framework **Tech:** The national sovereign chain
TOKEN ISSUER	
Ctrl Alt — Ctrl Alt Solutions DMCC **License:** VARA Cat 1 VA Issuance / ARVA **Tech:** XRP Ledger · third-party custody	SOVEREIGN — The Land Registry Itself **License:** Sovereign issuer, no intermediary **Tech:** The national sovereign chain
LAND REGISTER OWNER	
Dubai Land Department **Mandate:** Dubai Law No. 4 of 2022 **Tech:** Register held off-chain, token issued separately	GOVERNMENT — Government Land Department **Mandate:** Existing land registration law, extended **Tech:** The register *is* the chain

CLASSIFICATION Virtual Asset LIMITATIONS

Token = virtual asset

A wrapper referencing the deed, not the deed itself

CLASSIFICATION Real Estate BENEFITS

Token = title deed

A direct, registered property right

REGULATORY REACH

Regulate the asset by *what it is*

A tokenised title is a **sovereign registered asset**, not a speculative instrument. It belongs with the authority that already governs land, and moves to financial-market oversight only if its **behaviour** changes.

WITHIN THE REAL-ESTATE WINDOW

The land department regulates it

While the token behaves like property, being held, registered and transferred, it stays under the authority that already owns the register.

- Registration, ownership and title transfer
- Custody rules and beneficial ownership
- Fractional shares of a registered title
- Whole and pre-title (off-plan) deeds

ONLY WHEN BEHAVIOUR CHANGES

Financial approval joins in

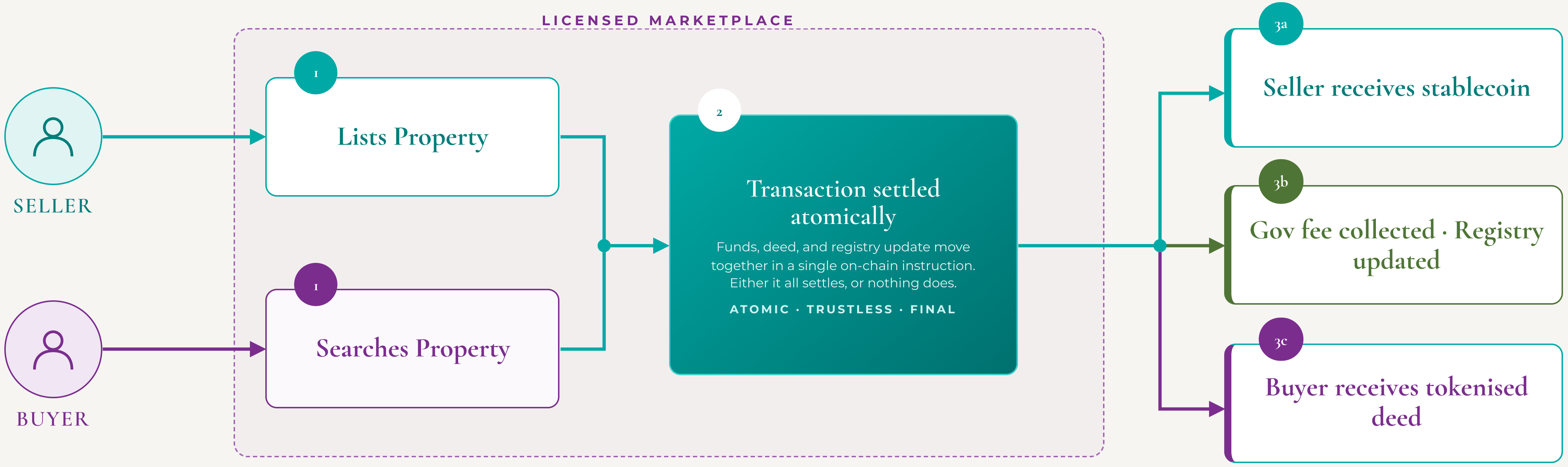
If a token starts to act like a financial product, the relevant financial regulator engages, alongside, not instead of, the land department.

- Listing on a crypto or regulated exchange
- Structuring as a derivative or security
- Mortgage-backed and pooled instruments
- Cross-border financial settlement

Regulate it as land while it behaves like land, and only reach for financial oversight when the token's behaviour calls for it.

SETTLEMENT

A sale settles in *one instruction*, or not at all



A licensed domestic bank serves as the stablecoin on-ramp and off-ramp: deposits issue stablecoin into the marketplace, and on-chain redemptions settle back to the national currency via standard bank transfer. Government fees are collected at the point of settlement, automatically.

Property-for-property swap: because both deeds are tokens on one ledger, two owners can exchange properties in a single atomic transaction, with no cash leg, even across jurisdictions.

BUILT-IN COMPLIANCE

The law runs *inside the contracts*

Because assets, money and rules all live on one ledger, compliance stops being a manual checkpoint. It runs inside the smart contracts, and so do the tools of the court.

AUTOMATED COMPLIANCE

Every transfer is checked before it settles

- **KYC and eligibility** verified before a token can move.
- **Ownership caps and foreign-ownership limits** enforced by code.
- **Transfer restrictions** applied automatically, per the framework.
- **Tax and government fees** collected at the point of settlement.

EMBEDDED JUDICIARY

Court and registry powers, built into the ledger

- **Dispute resolution and freezes** executed directly on the register.
- **Court-ordered transfers** and attestations recorded against the title.
- **Inheritance and succession** handled on-chain, without re-registration.
- Judgments and liens are **enforced by the system**, not chased on paper.

> *Compliance and the courts stop being paperwork.* They become part of the transaction.

USE CASES

Markets you choose to open, *on your terms*

One rail supports many forms of ownership. The government decides **which markets to enable, and when**.

01 Tokenised Whole & Pre Title Deeds

PRIMARY & SECONDARY

HOW IT WORKS

- **Primary:** Registry mints the token deed at first registration
- **Pre-deed:** Off-plan units issued as preliminary tokens
- **Secondary:** Atomic wallet-to-wallet transfer with live registry update

02 Tokenised Fractional Title Deed

INITIAL FRACTIONAL OFFERING + SECONDARY TRADING

HOW IT WORKS

- **Issuance:** An Initial Fractional Offering splits the deed
- **Holder rights:** Pro-rata ownership, rental distribution, disposal vote
- **Secondary:** Continuous on-chain trading on the marketplace

03 Tokenised Right of Use & Time Share

USUFRUCT · STANDARDISED & TIME-SLICED

HOW IT WORKS

- **Right of Use:** Standardised usufruct registered against the title
- **Time Share:** Master usufruct split into N recurring time-slices
- **Transferable:** Holder assigns on-chain; registry updates in real time

04 Tokenised Mortgages

ON-CHAIN ORIGINATION + SECONDARY DISTRIBUTION

HOW IT WORKS

- **Origination:** Banks disburse mortgages on-chain in stablecoin
- **Tokenisation:** Each mortgage wrapped as a tradeable asset
- **Distribution:** Sold to institutions, recycling bank capital

WHAT WE BUILD

A vertically integrated platform, *built end to end*

We develop every component of the system as an integrated whole. Because the pieces are interdependent, we deliver them together as a **single, coordinated programme**.

REGISTER

Land Register

The tokenised system of record for registered title deeds, the authoritative land register.

REGISTER

Interim Register

A separate register for pre-title, off-plan interests, a title before the building exists.

LEGAL TRACK

Legal Framework

The tokenisation law and licensing regime, run by Deca4 with specialist legal counsel.

FRONTEND

Government Frontend

End-to-end citizen and government UX, the public front door to the whole system.

Sovereign Chain · National-Currency Stablecoin

The foundation every module runs on

The chain and registers come first; the framework and citizen frontend build on top. Sequenced by dependency, delivered as one.

MORE THAN TECHNOLOGY

We build the system *and the framework* that governs it

Tokenised title only works if the *framework recognises the token as the deed*. Most vendors deliver code and leave the framework to you.

Deca4 **runs the regulatory track alongside the build**, hand in hand with specialist counsel, so the framework and the system fit from day one. **Aligning the two lets compliance run automatically**, a faster and cleaner outcome.

Tokenisation framework

The rules that make an on-chain token a registered, enforceable title.

Custody & transfer rules

How ownership is held, transferred, split and pledged, with legal certainty.

Licensing regime

The rules under which private operators are licensed to run marketplaces.

Regulator & central-bank alignment

Engaging the regulator and central bank on the framework and the settlement currency.

DELIVERY

Three moves to a *live sovereign market*

The path is sequenced by dependency. The technology is the smaller task. The decisive work is aligning the regulation and procedures that make a token a title.

1 — 2 — 3

Build the sovereign chain

Stand up the **government-owned foundation chain**, the national wallet, and the national-currency stablecoin, the rails everything else runs on.

Build the applications

Deliver the **land and interim registers**, the licensed marketplace, and settlement, the working system on top of the chain.

Align regulation & procedures

Enact the **tokenisation framework**, change the procedures that must change, and confirm a suitable stablecoin. Run in parallel from day one.

The technology is buildable today. Regulation is the critical path, *so we lead it, not follow it.*

THE UNLOCK

Once on-chain, *value compounds* and applications build on top

Because a title is a native token on a shared ledger, it becomes a **building block**, combined, split and re-used across products without leaving the sovereign register.

⬡ SOVEREIGN TOKEN

Tokenised Title

One asset on the national ledger, the input to everything on the right.

Collateral

Borrow against a title without selling it.

Fractional leverage

Diversify exposure across many properties.

Hedging

Offset risk with instruments on the same rail.

Futures & derivatives

Build forward products on verified assets.

Rental-yield instruments

Package recurring income as a tradable stream.

Cross-border transfer

Move value between jurisdictions natively.

From sovereign registry to *institutional liquidity*

STEP 5
Institutional capital
Global investment at scale

STEP 4
Packaged & securitised
Pooled into tradable products

STEP 3
Standardised compliant assets
Rules enforced by the token

STEP 2
Verified ownership & cashflow
Provable title, rent and history

STEP 1
On-chain title
Every deed a sovereign token

Once records are on-chain, each step strips out the compliance overhead the old system priced in, allowing real estate to be securitised into REITs and mortgage-backed securities (MBS), and opened to institutional capital.

> *Each block removes the friction the old system baked in.* Liquidity is the compounding result, not a separate product.

HOW WE WORK

Two ways to engage, *one outcome you own*

MODEL A

Fixed-Scope Implementation

We scope, build and hand over an agreed set of modules for a **defined, capped price**. You budget with certainty and own the system outright on delivery.

BEST WHEN

You have allocated capital and want cost certainty and a clean, procurement-friendly engagement.

MODEL B

Build & Revenue-Share

We build at **no upfront cost** and share in the transaction revenue the system earns over time. Our incentives are tied directly to the platform succeeding.

BEST WHEN

You have the political will to launch now and prefer to align our reward with results rather than fund the full build up front.

The same system, either way. The only variable is how it is paid for, *and you own the outcome.*

WHERE WE'D START

L1 · Sovereign Chain	Stand up the chain and define the blockchain developer licence
L2 · Tokenised Land & Interim Register	Full overview of the current land register database
L3 · Stablecoin	Joint workshops with the central bank and issuing bank
L4 · Regulatory Framework	Formal engagement of legal counsel to draft the framework

Thank *You*

We would be honoured to build this with you, step by step.

DECA4

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