Lex Koller and the DLT Act

A Feasibility Analysis of Pure Economic-Right Tokens Backed by a Diversified Swiss Real Estate Index

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List of abbreviations

CC	Code civil suisse
CO	Code des obligations
EIP	Ethereum Improvement Proposal
FF	Feuille fédérale
FINMA	Autorité fédérale de surveillance des marchés financiers
LB	Loi fédérale sur les banques et les caisses d'épargne
LBA	Loi fédérale sur le blanchiment d'argent dans le secteur financier
LEFin	Loi fédérale sur les établissements financiers
LEmb	Loi fédérale sur l'application de sanctions internationales
LFAIE	Loi fédérale sur l'acquisition d'immeubles par des personnes à l'étranger
LIMF	Loi sur l'infrastructure des marchés financiers
LPCC	Loi fédérale sur les placements collectifs de capitaux
LSFin	Loi fédérale sur les services financiers
OAIE	Ordonnance sur l'acquisition d'immeubles par des personnes à l'étranger
OIMF	Ordonnance sur l'infrastructure des marchés financiers
RO	Recueil officiel des lois fédérales
RS	Recueil systématique du droit fédéral
SECO	Secrétariat d'État à l'économie
SPV	Special Purpose Vehicle

I. Introduction

Switzerland holds one of the deepest and most stable residential real estate markets in the world. It is also one of the most closed. Since 1961, first under the Lex von Moos, then the Lex Friedrich, and from 1983 under the Lex Koller, the federal legislator has imposed a strict authorisation regime on the acquisition of residential real estate in Switzerland by persons abroad.[1] The policy aim, set out in Article 1 of the Lex Koller and explained at length in the Federal Council's 1981 message, is to prevent the residential housing stock of the country from passing into foreign hands.[2]

Over the same period the Swiss financial system has built one of the world's most progressive legal frameworks for tokenised assets. The Federal Council's December 2018 report on distributed ledger technology proposed a targeted set of amendments rather than a single new statute,[3] and that surgical choice was implemented by the Federal Act of 25 September 2020 on the Adaptation of Federal Law to Developments in Distributed Ledger Technology (the "DLT Act"),[45] which inserted, inter alia, the regime for ledger-based securities at Articles 973d to 973i of the Code of Obligations[6] and the new category of "DLT trading facility" at Articles 73a ff. of the Financial Market Infrastructure Act.[7]

The combination is paradoxical. Switzerland has at once one of the most rigid restrictions on foreign access to residential real estate and one of the most permissive regimes for tokenising claims and securities. The doctrinal question this paper asks is whether the two can be made to meet: whether a token specifically engineered to side-step Lex Koller's policy concerns — pure economic, non-voting, non-governance; issued by a fully Swiss-resident-owned Swiss issuer; backed by a diversified four-sector real estate index rather than a single residential asset;

[1]Loi fédérale sur l'acquisition d'immeubles par des personnes à l'étranger du 16 décembre 1983 (LFAIE), RS 211.412.41, art. 1.

[2]Message du Conseil fédéral relatif à une loi fédérale sur l'acquisition d'immeubles par des personnes à l'étranger et à l'initiative populaire « contre le bradage du sol national », du 16 septembre 1981, FF 1981 III 553 (« Message LFAIE 1981 »), 555 ss.

[3]Conseil fédéral, Bases juridiques pour la distributed ledger technology et la blockchain en Suisse — État des lieux avec un accent sur le secteur financier, 14 décembre 2018 (« Rapport CF DLT 2018 »).

[4]Message du Conseil fédéral concernant la loi fédérale sur l'adaptation du droit fédéral aux développements de la technologie des registres électroniques distribués, du 27 novembre 2019, FF 2020 233 (« Message DLT »).

[5]Loi fédérale sur l'adaptation du droit fédéral aux développements de la technologie des registres électroniques distribués du 25 septembre 2020, RO 2021 33.

[6]Code des obligations du 30 mars 1911 (CO), RS 220, art. 973d à 973i, introduits par la Loi DLT.

[7]Loi sur l'infrastructure des marchés financiers du 19 juin 2015 (LIMF), RS 958.1, art. 73a à 73f, introduits par la Loi DLT.

enforced ex ante through the permissioned-transfer architecture of ERC-3643 — can, under current Swiss law, give foreign retail investors fractional, low-ticket exposure to Swiss real estate (including its residential component) without triggering the authorisation requirement of Article 7 LFAIE.[8]

Research question

Under what doctrinal conditions can a Swiss-issued ledger-based security under Articles 973d to 973i CO — designed as a pure economic right with strictly no voting and no governance, issued by a 100% Swiss-resident-owned Swiss issuer, backed by a diversified index of Swiss real estate spanning residential, commercial, hospitality and operating businesses, and enforced through ERC-3643 compliance — provide foreign retail investors with stable, fractional, low-ticket exposure to Swiss real estate (including its residential component) without triggering the authorisation requirement of Article 7 LFAIE; and what are the structural limits this places on the issuer's foreign holding base, the token's redemption design, and its classification under FINMA practice?

Method and scope

The paper is doctrinal and constructive (and quite experimental). It restricts itself to Swiss federal primary law (statutes and ordinances), Federal Council preparatory works, and FINMA published practice; the technical specification cited for the compliance layer is the open Ethereum Improvement Proposal EIP-3643. The factual scope is buy-to-let residential real estate within the territory of the Swiss Confederation, leaving aside the secondary-residence overlay of the Lex Weber,[9] the Lex Weber's effects being orthogonal to the structural argument made here.

Roadmap

Chapter II describes the proposed structure and embeds the structural diagram on which the analysis turns. Chapters III to V map the three doctrinal pillars: the Lex Koller doctrine; the DLT Act and its ledger-based securities; and ERC-3643 as compliance architecture. Chapter VI is the core feasibility analysis, drawing the three pillars together into five cumulative

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[8] LFAIE, art. 7.

[9] Lex Weber : Loi fédérale sur les résidences secondaires du 20 mars 2015 ; non traitée ici, l'objet de l'étude étant l'investissement résidentiel de rendement (buy-to-let).

conditions. Chapter VII discusses liquidity, fractionalisation, and the stability characteristic of the token. Chapter VIII concludes.

II. The proposed structure

The structure under analysis has six functional layers. Figure 1 sets them out; the prose that follows takes each layer in turn.

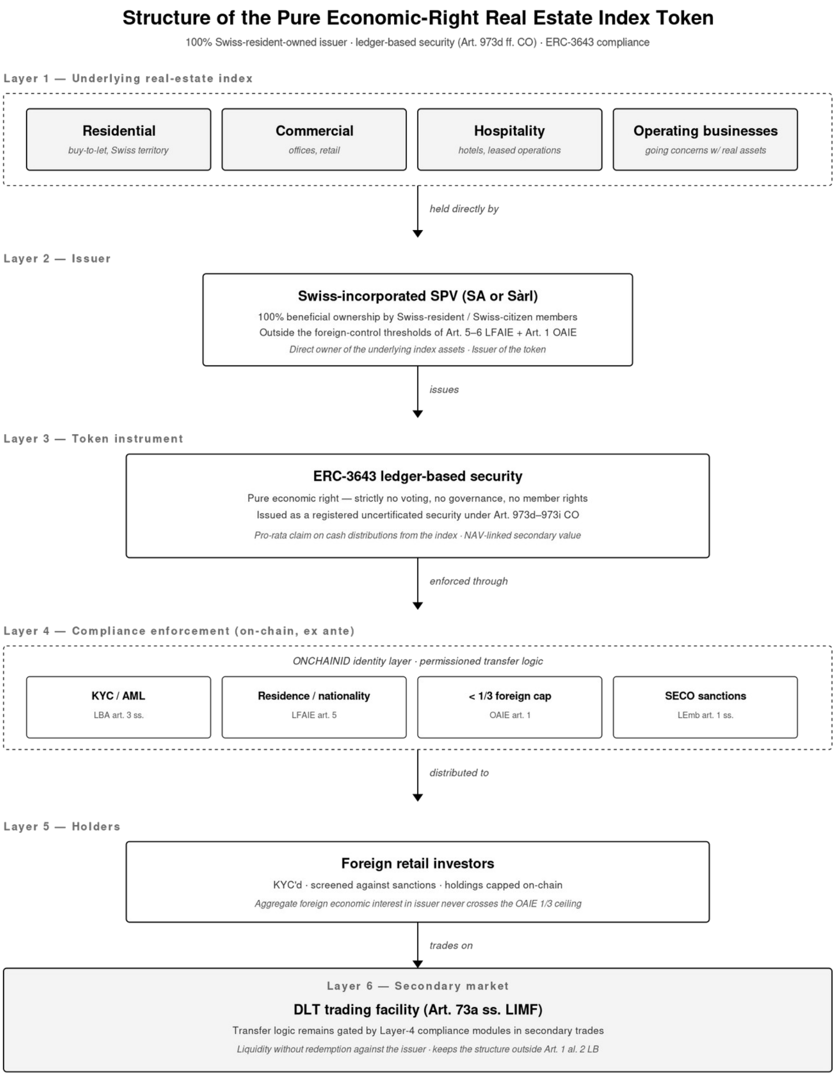

Figure 1 — Structure of the pure economic-right real estate index token

II.A The underlying real estate index

The issuer holds, on its own balance sheet, a diversified basket of Swiss-situated real estate spread across four sectors: residential properties acquired and held for the purpose of long-term rental (buy-to-let); commercial real estate (offices and retail); hospitality real estate (hotels and similar, held as commercial premises rather than as second homes in the sense of the Lex Weber); and operating businesses whose principal value lies in real assets. The intention of the diversification is twofold. Doctrinally, it places the residential component below the threshold at which it can be said to confer, on any individual token-holder, the economic equivalent of ownership of a specific residential asset. Economically, it spreads concentration risk and is the source of the stability characteristic of the token.

II.B The issuer

The issuer is a Swiss-incorporated stock company (société anonyme) or limited liability company (société à responsabilité limitée), constituted under the Code of Obligations and registered at the Swiss commercial register. Its share capital is held, beneficially and on the share register, one hundred percent by Swiss residents and Swiss citizens. The threshold of foreign economic interest in the issuer — as a percentage of capital, of voting rights and of "moyens financiers" within the meaning of Article 5 al. 1 let. c LFAIE — is therefore zero on day one and is held strictly below the one-third ceiling of Article 1 OAIE throughout the life of the structure.[10]

II.C The token instrument

The token issued by the SPV is a ledger-based security under Articles 973d to 973i CO. It is structured to confer on the holder a pure economic right: a pro-rata claim against the issuer for cash distributions in respect of its real estate portfolio and a pro-rata interest in the residual value of that portfolio on the issuer's winding-up. The token carries no voting rights, no member rights (in particular, none of the rights at Article 689 et seq. CO), no rights of information beyond what the LSFin and the prospectus require, and no governance rights of any kind over the management or disposal of the underlying assets. The doctrinal characterisation falls between a profit-participation certificate (bon de jouissance) under Article 657 CO[11] and a sui generis subordinated claim. The absence of any rights besides pure cash-flow rights is what positions the token under Article 973d CO as a registered uncertificated security with no embedded membership.[12]

II.D The compliance layer

Transfer of the token is enforced ex ante through the EIP-3643 (T-REX) permissioned-transfer architecture and its ONCHAINID identity layer. The compliance modules at the token-contract level enforce, at the time of every transfer and every subscription: KYC verification of the

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[10]Ordonnance sur l'acquisition d'immeubles par des personnes à l'étranger du 1er octobre 1984 (OAIE), RS 211.412.411, art. 1.

[11]CO, art. 657 (bons de jouissance).

[12]CO, art. 973d al. 1 et 2.

counterparty against the issuer's identification program under the LBA;[13] verification that the transferee is not a person resident in a jurisdiction subject to a Swiss financial-sanctions regime under the LEmb and its implementing ordinances;[14] verification that the transferee's residence and nationality are recorded, so that the aggregate foreign economic interest in the issuer does not cross the OAIE one-third threshold;[15] and any additional restrictions imposed by FINMA or by the prospectus.

II.E Distribution

The token is offered, on a non-targeted basis, to foreign retail investors subject to the compliance layer above. Distribution is governed by the LSFin prospectus and key-information-document regime where applicable.[16] Collective-investment-scheme distribution rules do not apply: the structure is not a collective investment scheme within the meaning of the LPCC because there is no third-party manager mandate and no pooling on behalf of investors — the issuer holds the assets as a corporate owner.[17]

II.F The secondary market

Secondary trading takes place on a DLT trading facility authorised under Articles 73a to 73f LIMF, or on a comparable foreign venue. Transfer of the token over the secondary market remains subject to the same on-chain compliance modules as primary issuance.[18] There is no redemption claim against the issuer: liquidity is provided by the secondary market, not by a redemption right. This last feature is what keeps the structure outside the deposit-taking perimeter of Article 1 al. 2 LB.[19]

[13] Loi fédérale sur le blanchiment d'argent dans le secteur financier du 10 octobre 1997 (LBA), RS 955.0, art. 3 ss.

[14] Loi fédérale sur l'application de sanctions internationales du 22 mars 2002 (LEmb), RS 946.231.

[15] LFAIE, art. 5 al. 1 let. c et art. 6 ; OAIE, art. 1.

[16] Loi sur les services financiers du 15 juin 2018 (LSFin), RS 950.1, art. 35 ss. (prospectus).

[17] Loi fédérale sur les placements collectifs de capitaux du 23 juin 2006 (LPCC), RS 951.31, art. 7 ss.

[18] LIMF, art. 73a ss.

[19] Loi fédérale sur les banques et les caisses d'épargne du 8 novembre 1934 (LB), RS 952.0, art. 1 al. 2.

III. Lex Koller doctrine

The Federal Act on the Acquisition of Real Estate by Persons Abroad of 16 December 1983 — universally known as Lex Koller, after the federal counsellor responsible for the bill — is the operative federal restriction on the acquisition of Swiss real estate by foreign-controlled persons. Its purpose, set out at Article 1 LFAIE and amplified by the Federal Council's 1981 message, is to prevent the excessive transfer of Swiss soil into foreign hands.[20] Three structural questions arise for the present analysis: what is caught by the concept of "acquisition" (III.A); who is a "person abroad" or a foreign-controlled person (III.B); and what is the gateway out of the authorisation requirement (III.C).

III.A Acquisition (Art. 2 + 4 LFAIE)

Article 2 al. 1 LFAIE submits to authorisation the acquisition by persons abroad of immovable property situated in Switzerland.[21] Article 2 al. 2 carves out four exceptions of which the most important for the present analysis is letter a: real estate serving as the principal residence of the acquirer at the place of work.[22] None of the four exceptions covers buy-to-let residential real estate, which is therefore the analytical target.

Article 4 LFAIE defines what is caught. The provision lists eight forms of acquisition. Letters a through f cover the obvious cases: transfer of ownership, acquisition of a usufruct or building right, acquisition of shares in a real estate company, participation in an unlisted real estate fund, and the financing of an acquisition by a person abroad.[23] Letter g is the catch-all: every other juridical act which confers on a person abroad the actual power of disposal over an immovable property of similar effect to ownership.[24]

Letter g is doctrinally the heart of the matter for tokenised structures. The 1981 Message explains that the provision was inserted as an anti-circumvention rule, in response to the practitioner experience that the older statutes were systematically defeated by economic constructions that achieved the result of foreign ownership without the legal form of it.[25] The legislator's concern is for the substance, not the legal label. Three points follow.

[20] LFAIE, art. 1 ; Message LFAIE 1981, 555 ss.

[21] LFAIE, art. 2 al. 1.

[22] LFAIE, art. 2 al. 2 let. a.

[23] LFAIE, art. 4 al. 1 let. a à f.

[24] LFAIE, art. 4 al. 1 let. g.

[25] Message LFAIE 1981, 565 ss. (la lettre g est introduite expressément comme clause anti-contournement).

First, the test is conferral of a power of disposal effective and similar to ownership. The ordinary right to receive a flow of distributions, without any power to direct the use, lease or sale of the underlying asset, is not such a power. The 1981 Message itself distinguishes ownership-equivalent positions from passive financial claims and confirms that the latter are not what Article 4 letter g was designed to catch.[26]

Second, the question is asked at the level of the individual foreign investor's relation to a specific property. The diversification of an index across many properties and sectors dilutes that relationship: no individual token-holder gains effective disposal power over any specific Swiss residential asset.

Third, where the question is one of aggregate foreign holding through a Swiss corporate vehicle, the legislator has not relied on Article 4 letter g but on the distinct foreign-control rule of Articles 5 and 6 LFAIE.

III.B Persons abroad and foreign-controlled persons (Art. 5–6 LFAIE; Art. 1 OAIE)

Article 5 LFAIE defines "person abroad" by reference, for natural persons, to residence and nationality and, for legal persons and companies without legal personality, by reference to the seat of the legal person abroad or to its foreign control regardless of seat. Article 6 LFAIE specifies the foreign-control test for legal persons whose seat is in Switzerland.[27] The implementing rule sits at Article 1 OAIE: a Swiss-seated legal person is deemed under preponderant foreign control when persons abroad hold more than one third of its capital, or more than one third of its voting rights, or more than one third of its financial resources by way of loan or otherwise.[28]

For a Swiss-seated SPV issuing economic-rights tokens, two consequences follow. First, the SPV will be treated as a person abroad — and therefore as itself requiring an authorisation under Article 7 LFAIE for any acquisition of residential real estate — if and only if its foreign capital share, its voting rights share, or its financial-means share crosses the one-third threshold. Second, the one-third threshold is calculated cumulatively across all the routes by which foreigners obtain economic interest: non-voting economic rights count, even though

[26]Message LFAIE 1981, 567.

[27]LFAIE, art. 5 al. 1 ; art. 6.

[28]OAIE, art. 1 (seuil cumulatif d'un tiers en capital, en droits de vote ou en moyens financiers).

they do not carry voting power, because they affect the capital and financial-means sides of the test.

The structural significance is direct. As long as the aggregate share of the issuer's economic interest held by persons abroad — i.e., by holders of the economic-rights token who are themselves persons abroad — stays below one third, the issuer is not a person abroad, the residential real estate it holds is not deemed acquired by foreigners, and no authorisation is required for that holding under Article 7 LFAIE.

III.C The fund carve-out (Art. 4 al. 1 let. e LFAIE)

Article 4 al. 1 letter e LFAIE provides a critical carve-out for collective investment schemes. The acquisition of units in a Swiss real estate fund is not deemed an acquisition of real estate by a person abroad if the fund is admitted to a regulated market in Switzerland or if its units are regularly traded.[29] The carve-out reflects the legislator's view that, at the level of a regularly traded fund, the policy concern of foreign control over Swiss residential housing is sufficiently diluted by the depth and breadth of the holder base. The L-QIF reform of 2020 introduced a parallel regime for limited qualified investor funds, but the LFAIE carve-out remains tied to the public-market features.[30]

For present purposes, the carve-out is a comparator rather than a target. The structure proposed in this paper is deliberately not a regulated collective investment scheme: the issuer holds the assets directly on its corporate balance sheet, and there is no separate management mandate. The question is therefore whether a similar functional result — fractional foreign access to a diversified Swiss real estate basket without authorisation — can be reached outside the LPCC by way of the DLT Act's ledger-based-security regime, anchored on the foreign-control limb of Articles 5 and 6 LFAIE rather than on the fund-units limb of Article 4 al. 1 letter e.

[29] LFAIE, art. 4 al. 1 let. e ; sur le régime des fonds immobiliers, voir LPCC art. 58 ss.

[30] Message du Conseil fédéral concernant la modification de la loi sur les placements collectifs (L-QIF), FF 2020 1852.

IV. The DLT Act and ledger-based securities

IV.A Genesis

The DLT Act is a surgical instrument. Rather than enacting a single new code for distributed-ledger transactions, the federal legislator chose to insert targeted amendments into the existing financial-market statutes. The choice was foreshadowed by the Federal Council's report of 14 December 2018, which mapped the existing legal framework against the requirements of distributed-ledger transactions and identified the specific gaps that required statutory intervention.[31] Two of those gaps are directly relevant here: the absence of a private-law security regime allowing securities to be issued natively on a distributed ledger (filled by the new Articles 973d to 973i CO), and the absence of a market-infrastructure category capable of operating a secondary market for such securities (filled by Articles 73a to 73f LIMF). The Message of 27 November 2019 sets out the legislator's reasoning in full.[32]

IV.B Ledger-based securities (Art. 973d–973i CO)

Article 973d al. 1 CO defines a ledger-based security as a right, the function of which corresponds to that of a security, that is constituted by entry in a distributed ledger and may, by the parties' agreement, be enforced and transferred only through the ledger. Four cumulative conditions for valid constitution are set out at Article 973d al. 2 CO: the ledger must be governed by a registration agreement;[33] the holders must, through technical means, have power of disposal over their rights to the exclusion of unauthorised parties;[34] the ledger must preserve its integrity by appropriate technical measures;[35] and the content of the right, the function of the ledger and the registration agreement must be transparent and accessible to anyone with an interest.[36] Article 973e CO then governs the legal effect of transfer through the ledger; Article 973f CO governs cancellation in the event of malfunction.[37]

The legislative choice in Articles 973d ff. CO is functional rather than ontological: any right whose function corresponds to that of a security may be constituted on a distributed ledger,

[31] Rapport CF DLT 2018, chap. 5 et 6.

[32] Message DLT, FF 2020 233, 253 ss. (objectifs et choix systémiques) ; ibid. 263 ss. (les nouveaux art. 973d ss. CO).

[33] CO, art. 973d al. 2 ch. 1.

[34] CO, art. 973d al. 2 ch. 2.

[35] CO, art. 973d al. 2 ch. 3.

[36] CO, art. 973d al. 2 ch. 4.

[37] CO, art. 973e (transfert) ; art. 973f (annulation).

regardless of its substantive private-law form. The Message DLT confirms this: the regime is designed to be category-neutral, so that bonds, profit-participation certificates, bons de jouissance, fund units and sui generis claims can each be tokenised, subject to each instrument's underlying corporate-law requirements.[38]

For the present structure, the relevant substantive form is a pure economic claim. The closest pre-existing instrument is the bon de jouissance under Article 657 CO, which grants a right to a share of distributed profits or liquidation surplus without voting rights or other member rights.[39] The Article 657 form is, however, only available to stock companies and is limited in its statutory cap. The structure proposed here uses an alternative path: a sui generis contractual claim against the issuer for pro-rata distributions and a pro-rata interest in residual value, tokenised as a ledger-based security under Article 973d CO and incorporated into the prospectus and the terms of issue of the token. The functional position of the holder is identical to that of a holder of bons de jouissance but the statutory cap and form constraints of Article 657 CO are avoided.

IV.C Identification, integrity, transparency

The cumulative conditions of Article 973d al. 2 CO map directly onto the EIP-3643 (T-REX) standard. The registration-agreement condition is satisfied by the terms of issue, which constitute the agreement between issuer and holders that the token, and only the token, embodies the right. The power-of-disposal condition is satisfied by the cryptographic key control built into the wallet architecture. The integrity condition is satisfied by the Ethereum (or comparable) consensus mechanism on which the token is deployed. The transparency condition is satisfied by publication of the terms of issue, the technical specification of the token contract, and the registration agreement.

IV.D DLT trading facility (Art. 73a–73f LIMF)

The DLT Act creates a new category of authorised financial-market infrastructure: the système de négociation fondé sur la TRD. Article 73a LIMF defines it as a multilateral facility for the trading of DLT-securities. Article 73b sets out the authorisation requirements; Articles 73c to 73f the operating rules and the conditions on participation.[40] The structure proposed here uses a DLT trading facility as the secondary-market venue, which is significant in two respects.

[38] Message DLT, FF 2020 233, 264 (neutralité fonctionnelle de la catégorie).

[39] CO, art. 657 al. 1 ; sur la limite statutaire, voir art. 657 al. 2.

[40] LIMF, art. 73a (définition) ; art. 73b (autorisation) ; art. 73c à 73f (règles d'organisation et de participation).

First, the existence of a Swiss-authorised venue means that the token’s secondary-market liquidity can be provided under Swiss supervisory law without resort to foreign markets. Second, the on-chain compliance modules of ERC-3643 remain operative in secondary trades on the DLT trading facility, which means that the LFAIE one-third cap and the SECO sanctions screening remain effective on every secondary-market transfer.

V. ERC-3643 as compliance architecture

V.A The standard

Ethereum Improvement Proposal 3643, the T-REX (Token for Regulated Exchanges) token standard, defines an interface for permissioned security tokens.[41] Its central design choice is to separate the token contract from a compliance contract and an identity registry. Every transfer call invokes the compliance contract, which calls the identity registry to verify that both sender and receiver have valid identities and that the proposed transfer complies with the configured rules.

V.B ONCHAINID

ONCHAINID is the EIP-3643 identity layer. Each prospective holder is assigned an on-chain identity (a smart-contract identity) to which claim issuers — typically the issuer's KYC provider — issue cryptographically signed claims. Claims of relevance to the present structure include: KYC pass, jurisdiction of residence, nationality, absence of sanctions listing, and qualified-investor status where relevant under the LSFin and LEFin. The compliance contract verifies the relevant claims at each transfer.

V.C Mapping to Swiss substantive law

The compliance modules of EIP-3643 are configurable. For the present structure, four modules are instantiated, mapping respectively onto the LBA, the LFAIE, the OAIE one-third cap, and the LEmb sanctions regime.

First, KYC and AML. Every prospective holder must hold a valid KYC claim issued by an LBA-eligible identification provider.[42] The issuer's diligence obligations under Articles 3 ss. LBA are satisfied by the cryptographic verifiability of the claim, and the on-chain rejection of any transfer to an identity without a valid claim discharges the obligation at the moment of every transfer.

Second, residence and nationality screening. The compliance contract reads the residence and nationality claims from ONCHAINID at each transfer and rejects transfers that would result in the SPV being treated as a person abroad within the meaning of Article 5 LFAIE.[43]

[41] Ethereum Improvement Proposal 3643 (T-REX Token Standard), accessible sur https://eips.ethereum.org/EIPS/eip-3643.

[42] LBA, art. 3 ss. (devoirs de diligence d'identification du cocontractant et de l'ayant droit économique).

[43] LFAIE, art. 5 ; OAIE, art. 1.

Third, the aggregate foreign holding cap. A module tracks the running total of token holdings by persons abroad (as a percentage of the SPV's economic interest) and rejects any transfer that would cross the OAIE one-third threshold. This is the on-chain implementation of the Article 6 LFAIE foreign-control test.

Fourth, SECO sanctions screening. A module rejects transfers to identities listed under the LEmb implementing ordinances. The check is performed against the SECO-published lists at the time of each transfer.[44]

V.D Ex ante enforcement and the issuer's diligence

Swiss law does not, as a matter of substantive rule, prescribe the technical means by which an issuer must ensure compliance with the LFAIE or the LBA. What it requires is that the issuer in fact prevents the constitution of a foreign-controlled position and that it in fact identifies its counterparties. Ex ante on-chain enforcement is, if anything, a more reliable means of satisfying these obligations than the ex post diligence applied at the time of each share transfer in a conventional Swiss share register. The compliance architecture of EIP-3643 thus discharges the issuer's substantive duties under the LFAIE, the LBA and the LEmb at the moment of every primary issuance and every secondary-market transfer.

[44] LEmb, art. 1 ss. ; et les ordonnances d'exécution publiées par le Secrétariat d'État à l'économie (SECO).

VI. Core feasibility analysis

The doctrinal feasibility of the structure rests on five sub-questions, each taken in turn.

VI.A Does the token confer an owner-equivalent position under Article 4 al. 1 let. g LFAIE?

The answer is no, provided the structural features described in Chapter II are maintained. Three considerations converge.

First, the legal content of the right is purely a claim to cash distributions and to a pro-rata interest in residual value. There is no voting right, no right to direct the use or disposition of the underlying assets, no governance influence over the issuer, no right of consultation. The 1981 Message expressly distinguishes such passive financial positions from ownership-equivalent positions.[45] Article 4 al. 1 letter g LFAIE is an anti-circumvention rule; it is not engaged by financial claims that do not, in substance, confer the power of disposal effective and similar to ownership over a specific Swiss immovable.

Second, the diversification of the underlying index across four sectors and across many properties places each token-holder at a structural distance from any specific residential asset. The doctrinal hinge of Article 4 al. 1 letter g — the specific immovable — is absent: no individual holder has a position over any specific property.

Third, the absence of a redemption right against the issuer, combined with the freely transferable nature of the token on a DLT trading facility, situates the holder economically in the position of a passive investor in a tradable security. The 1981 Message is specific that securities trading without an underlying claim to a specific Swiss immovable is outside the LFAIE.

VI.B Keeping the issuer outside the foreign-control test (Art. 5–6 LFAIE; Art. 1 OAIE)

The structurally binding constraint is Article 1 OAIE. The aggregate share of the issuer's economic interest in foreign hands must never cross the one-third threshold — whether measured by capital, by voting rights, or by financial means.[46] Two doctrinal sub-points are critical.

[45] Message LFAIE 1981, 567 (les positions financières passives sont distinguées des positions équivalentes à la propriété).

[46] OAIE, art. 1 (calcul cumulatif des trois critères).

First, the share-capital base of the SPV remains, throughout, one hundred percent Swiss-resident-owned: the founders' shares are not tokenised and remain on the conventional Swiss share register. The token is issued as a separate non-equity instrument, the value of which is referenced to the SPV's underlying portfolio rather than to its share capital. The OAIE test for "capital" is therefore satisfied independently of the foreign-holder distribution of the token.

Second, on the financial-means limb of the test, the token represents external financial resources of the issuer, and the foreign share of those resources counts toward the OAIE one-third. The on-chain cap module described at Chapter V.C rejects any transfer that would cause the foreign share of outstanding tokens to cross the threshold. As long as the cap is set at, for example, 30% of total tokens issued — leaving a safety margin against rounding and currency effects — the OAIE limit is structurally observed.

The combination of these two sub-points means that the SPV is not, at any time, a person abroad within the meaning of Article 5 al. 1 letter c LFAIE: it does not require an authorisation under Article 7 LFAIE for its own holding of Swiss residential real estate.

VI.C Within or outside the LPCC?

The structure is deliberately situated outside the LPCC. A collective investment scheme under Article 7 LPCC requires (i) pooled assets, (ii) on behalf of investors, (iii) for collective management by a third party.[47] The proposed structure is direct corporate ownership: the SPV holds the real estate on its own balance sheet, manages it through its own organs, and issues a non-equity token referenced to its portfolio. There is no third-party management mandate and no pooling on behalf of investors. The structure is therefore a corporate issuer with a tokenised economic-rights instrument, not a fund.

The choice has two consequences. First, the LFAIE carve-out at Article 4 al. 1 letter e — for units in a regularly-traded Swiss real estate fund — is unavailable. The structure must satisfy the LFAIE by its own structural design rather than rely on the fund carve-out. Second, the FINMA fund authorisations under the LPCC and the LEFin are not engaged: the issuer is neither a fund nor a fund manager.[48]

[47] LPCC, art. 7 ; art. 13 ss. (placements collectifs et autorisations).

[48] LSFin, art. 35 ss. ; Loi sur les établissements financiers du 15 juin 2018 (LEFin), RS 954.1, art. 18 ss.

The L-QIF reform of 2020 confirms the policy direction: the federal legislator has progressively opened the LPCC to less heavily regulated qualified-investor structures.[49] The structure proposed here is a parallel development outside the LPCC: a retail-accessible structure made workable by the DLT Act and the EIP-3643 compliance architecture rather than by the supervisory layer of the LPCC.

VI.D The deposit-taking question (Art. 1 al. 2 LB; FINMA Circulaire 2008/3)

A token characterised by stability and by a fixed or quasi-fixed redemption claim against the issuer would be at risk of classification as a deposit (dépôt du public) under Article 1 al. 2 LB, with the consequence that the issuer would be required to hold a banking licence. FINMA Circular 2008/3 sets out the analytical framework: a deposit is constituted by an obligation of the issuer to repay an amount to the holder in money.[50] Two design choices in the present structure keep it outside this category.

First, there is no redemption claim against the issuer. The token is freely transferable on the secondary market but the issuer is not obligated to repurchase it. The holder's exit is provided by the secondary market, not by redemption.

Second, the periodic cash distributions to which the holder is entitled are not a contractually fixed obligation of the issuer; they reflect the cash flow generated by the underlying portfolio, distributed pro-rata. The position is closer to that of a profit-participation holder than to that of a depositor.

The combination is decisive: there is neither a repayment obligation nor a fixed return. The token is not a deposit within the meaning of Article 1 al. 2 LB, and the issuer is not engaged in deposit-taking.[51] The stability perceived by the holder derives from diversification across the underlying index, not from a redemption peg.

VI.E FINMA token classification

Under the FINMA ICO Guide of 16 February 2018, security tokens are tokens that confer rights against an issuer in respect of an asset (asset tokens) or that confer rights in respect of an issuer's corporate or governance structure (equity-like tokens). The present token, conferring a pro-rata claim on cash distributions and a pro-rata interest in residual value, is an asset token

[49] LPCC, art. 7 al. 1 (gestion par un tiers professionnel) ; FF 2020 1852, ch. 1 (objectif du L-QIF).
[50] FINMA, Circulaire FINMA 2008/3 « Dépôts du public auprès d'établissements non bancaires », ch. 10 ss.
[51] LB, art. 1 al. 2 ; FINMA, Circulaire 2008/3, ch. 10.

in the FINMA taxonomy.[52] It is also a valeur mobilière in the sense of the LIMF: it is a security capable of standardised circulation on the market.[53]

The FINMA Stable Coins Complement of 11 September 2019 introduces the distinct category of stable-coin assessment, applicable to tokens whose value is pegged to a reference asset by a redemption or contractual mechanism.[54] The present token has no peg and no redemption mechanism; the FINMA stable-coin framework does not apply. The risk of mis-classification as a stable-coin token is best mitigated by ensuring that the token is not marketed as a stable instrument in a regulatory sense — i.e., the marketing materials must describe the diversification-driven nature of any perceived stability, not a guarantee.

VI.F Synthesis: the conditions of feasibility

The structure can be made to fit within current Swiss federal law under five cumulative conditions.

First, the underlying index must be genuinely diversified across the four sectors and a number of properties sufficient to ensure that no individual token-holder gains a position over any specific Swiss residential asset.

Second, the issuer's share capital must be one hundred percent Swiss-resident-owned at all times, and the aggregate foreign economic interest in the issuer (including via the tokens) must never cross the OAIE one-third threshold. The threshold is enforced ex ante by the on-chain compliance module.

Third, the token must confer pure economic rights only: no voting, no governance, no member rights. The terms of issue must explicitly exclude any such right.

Fourth, the token must not be redeemable against the issuer. Liquidity is provided by the secondary market on a Swiss DLT trading facility under Articles 73a ff. LIMF.[55]

Fifth, the marketing of the token must not present it as a stable-value instrument in a regulatory sense. The diversification-driven stability is presented as an investment characteristic, not as a peg.

[52] FINMA, Guide pratique pour les questions d'assujettissement concernant les initial coin offerings (ICO), 16 février 2018 (« Guide pratique ICO »), 3 (jetons d'actifs / asset tokens).

[53] LIMF, art. 2 let. b (valeur mobilière).

[54] FINMA, Complément au guide pratique du 16 février 2018 concernant les initial coin offerings (ICO) — Stable Coins, 11 septembre 2019 (« Complément Stable Coins »).

[55] LIMF, art. 73a ss. ; FINMA, autorisations TRD délivrées en application de la Loi DLT.

Where these five conditions are observed, the structure does not require an LFAIE authorisation; it is not a fund within the LPCC; it is not a deposit-taking activity within the LB; and it is an LIMF asset token under FINMA practice.

VII. Liquidity, fractionalisation and stability

VII.A The DLT trading facility as secondary market

Articles 73a to 73f LIMF create the legal infrastructure for a regulated secondary market in ledger-based securities. The DLT trading facility is the central enabler of liquidity in the proposed structure. Three points are worth emphasising.

First, the DLT trading facility is multilateral: it brings together a plurality of buyers and sellers and allows price formation. The token is therefore a regularly tradable instrument in the sense of FINMA practice, even if its issuer is a private SPV rather than a listed company.

Second, the DLT trading facility is subject to FINMA prudential supervision. Trades executed on it benefit from the operational reliability and the conduct rules of the LIMF, including the rules on transparency, market integrity and orderly trading.

Third, the on-chain compliance modules of EIP-3643 continue to operate on secondary trades. The LFAIE one-third cap, the SECO sanctions screening and the KYC requirements are enforced for every secondary trade, not only for primary issuance. This is structurally significant: the supervisory and statutory compliance of the structure is not weakened by secondary trading.

VII.B Fractionalisation and low-ticket access

Articles 973d to 973i CO impose no minimum denomination requirement on ledger-based securities.[56] The token can therefore be issued in arbitrarily small fractional units. The minimum ticket size for a foreign retail investor is consequently a function of the issuer's distribution decision rather than of any legal floor. The practical access threshold can be set at the level of a few hundred Swiss francs without doctrinal difficulty.

The combination of fractionalisation with the LFAIE one-third cap, however, has a structural implication for the size of the SPV that needs noting. The maximum aggregate foreign investment in the SPV is constrained by the OAIE ceiling.[57] To support a meaningful low-ticket retail base, the SPV must be sized so that one third of its capitalisation is sufficient to accommodate the intended foreign retail demand. In practice this means that the SPV must be funded, beyond the foreign retail tokens, by Swiss-resident capital amounting to at least two

[56] CO, art. 973d ss. (aucun seuil de coupure).

[57] OAIE, art. 1 (seuil cumulatif d'un tiers).

thirds of its capitalisation — whether by founders' equity, by Swiss-resident-only debt, or by Swiss-resident-held tranches of the same token.

VII.C Returns and stability

The returns to a token-holder are of two kinds: periodic distributions of cash generated by the underlying portfolio (rental income, hospitality net revenue, business cash flows); and the secondary-market price of the token, which tracks the net asset value of the underlying portfolio.

The diversification across four sectors is the source of the stability characteristic. Residential rental income and commercial rental income have different cyclical characteristics; hospitality cash flow is more volatile but typically uncorrelated with the residential cycle; operating-business cash flow has its own cycle. The aggregate cash flow of the index is therefore less volatile than the cash flow of any single sector.

This is a stability of distribution and price-tracking, not a regulatory stable-value status. The legal characterisation does not turn on the volatility profile of the cash flows; it turns on the absence of a peg or redemption claim. The diversification-driven stability is an investment characteristic of the token, not a regulatory feature.

VII.D Comparison with the LPCC fund route

A complementary observation: the LFAIE Article 4 al. 1 letter e carve-out for regularly-traded Swiss real estate funds would, on its face, provide a cleaner route to foreign retail access — foreign investors can hold fund units without any LFAIE authorisation, and the carve-out has been long-established. The choice to remain outside the LPCC reflects a deliberate trade: the LPCC regulatory layer (fund-manager licensing, supervisory approval of fund documentation, prudential supervision of the fund manager under the LEFin) is exchanged against the lighter touch of a corporate-issuer structure under the DLT Act and the LIMF. For an issuer prioritising operational agility and low cost of capital, the DLT Act path is the more attractive of the two. For an issuer prioritising the certainty of an established carve-out, the LPCC path remains available. The two paths are complementary.

VIII. Conclusion

The Lex Koller and the DLT Act, despite the apparent tension between their policy logics, can be made to coexist within a single structure for fractional foreign access to Swiss real estate. The doctrinal route runs through five cumulative conditions: a genuinely diversified four-sector index; a 100% Swiss-resident-owned issuer with foreign economic interest permanently capped below the OAIE one-third threshold; a token conferring pure economic rights only; no redemption claim against the issuer; and a marketing posture that does not present the token as a regulatory stable-value instrument. Under these conditions, the structure does not require an LFAIE authorisation, is not a collective investment scheme under the LPCC, is not a deposit-taking activity under the LB, and is properly classified as an LIMF asset token under FINMA practice.

The compliance architecture supplied by EIP-3643 is, in this paper's view, not merely sufficient but actively superior to the conventional Swiss share-register diligence for the kind of structurally fragile compliance that the LFAIE and the LEmb require. Ex ante on-chain rejection of non-compliant transfers eliminates the timing gap inherent in ex post diligence on a paper register. The doctrinal claim of this paper is that the substantive duty of the issuer under the LFAIE, the LBA and the LEmb is discharged, in form and in substance, by the EIP-3643 compliance layer.

Three reflections on the limits and the future of the structure follow.

First, the doctrinal protection of the proposed structure rests entirely on the absence of an owner-equivalent position at the level of any individual token-holder. The structural diversification of the underlying index, and the rejection of governance and voting rights, are not merely policy preferences but doctrinal preconditions. Any deviation — an issuer concentrated in residential real estate, a token carrying voting rights, an effective economic peg — re-engages Article 4 al. 1 letter g LFAIE.

Second, the OAIE one-third threshold is structurally binding. The size of the foreign retail base is, at all times, a function of the size of the Swiss-resident base. Doctrinally workable; commercially constraining.

Third, the federal legislator has shown, through the DLT Act and the L-QIF reform of 2020, a willingness to adapt its statutes to the technological and structural realities of contemporary financial markets. An interpretive clarification of Article 4 al. 1 letter g LFAIE by the Federal

Council or by FINMA, confirming that non-governance, fractional, on-chain-screened tokens fall outside its scope, would simplify the structural compliance burden without compromising the policy objective of the Lex Koller. Pending such clarification, the structure proposed in this paper operates safely within current Swiss law on the conditions specified above.

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