



# Ledger-based securities: introduction of DLT shares in Switzerland

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This legal update is part of a series summarizing the most important upcoming amendments to Swiss corporate law in a condensed form as relevant for legal practitioners. Previously published legal updates can be found on our website at [Swiss Corporate Law Reform 2020](#). New legal updates on the corporate law reform are regularly e-mailed to our newsletter subscribers and published on our website.

## Key takeaways

On 1 February 2021, the Federal Council partially enacted the Federal Act on the Adaptation of Federal Law to Developments in Distributed Ledger Technology (DLT bill). This creates the possibility for Swiss stock companies to issue shares in the form of cryptographic tokens represented on a blockchain.

- **The introduction of so-called ledger-based securities represents a new category of securities in accordance with the Swiss Code of Obligations (CO). This creates the possibility of issuing shares in the form of cryptographic tokens.**
- **The new provisions are designed to be technology-neutral. Therefore, they do not contain any technical specifications and only impose material requirements on the securities ledger, in which the ledger-based securities must be entered, and on the transfer of the ledger-based securities.**
- **The assignment of shares in the form of cryptographic tokens respectively of ledger-based securities is made through the securities ledger and in accordance with the rules of the so-called registration agreement. The concrete terms of this agreement will be determined by the contracting parties.**

## Introduction

Distributed ledger technology (DLT), especially in combination with blockchains, is one of the most promising developments in the field of digitalisation. The aim of the DLT bill is therefore to create a legal framework that will enable the opportunities offered by these technologies to be exploited. In this way, Switzerland should be positioned to develop into a leading centre in the field of DLT technologies.

On 1 February 2021, the Federal Council enacted those elements of the DLT bill that allow the introduction of the so-called ledger-based securities, a new category of securities according to the Swiss Code of Obligations. These securities can be represented and transferred on a blockchain and managed using DLT technology. The enacted amendments concern the Swiss Code of Obligations (Art. 622 para. 1 and 1bis, 973c – 973i and 1153a CO), the Federal Intermediated Securities Act (Art. 4 para. 2 lit. f and g; Art. 5 lit. g and h; Art. 6 para. 1 lit. c and d as well as para. 2 and 3; Art. 7 para. 1 and 2; Art. 9 para. 1; Art. 11 para. 3 lit. b, and Art. 17 para. 1 lit. b as well as para. 4 FISA) and the Federal Act on Private International Law (Art. 105 para. 2, 106, 108a and 145a PILA).

Important new provisions from the perspective of stock corporation law are Art. 622 para. 1 CO, which now provides that the shares of a Swiss stock corporation, on the basis of a corresponding statutory basis, may also be issued as ledger-based securities within the meaning of Art. 973d CO, and Art. 973d to 973i CO, which regulate the new instrument of ledger-based securities.

## What are ledger-based securities?

### Overview

A ledger-based security is a right that is registered in a securities ledger in accordance with an agreement between the parties (the so-called registration agreement). It can only be asserted and transferred to others via this securities ledger (Art. 973d para. 1 CO). The assignment of ledger-based securities is possible without the requirement of a written form.

The securities ledger must meet the following requirements (Art. 973d para. 2 CO):

1. It gives the creditors, but not the debtor, power of disposal over their rights by means of technical procedures.
2. Its integrity is protected from unauthorized modification by appropriate technical and organizational measures, such as joint administration by several independent parties.
3. The content of the rights, the functioning of the ledger and the registration agreement are recorded in the ledger or in accompanying data linked thereto.
4. Creditors may view the information and ledger entries concerning them and check the integrity of the content of the ledger concerning them, without the assistance of third parties.

## Application

All rights that can be represented by negotiable securities can be issued as ledger-based security. These are:

- Contractual claims (fungible as well as non-fungible rights)
- Membership rights that can be issued as negotiable securities or uncertificated securities (membership rights of stock corporations and partnerships limited by shares)
- Rights in rem that can be issued as negotiable securities or uncertificated securities

However, pure cryptocurrencies or crypto-based means of payment (payment tokens or bare-bone tokens), such as bitcoin or ether, are not eligible to be structured as a ledger-based security. Such tokens do not confer any claims against an issuer. They are therefore qualified as purely intangible assets.

## Legal effects of the ledger-based security

The effect of the ledger-based securities is similar to that of negotiable securities. Therefore, according to Art. 973e para. 1 CO, the debtor of the ledger-based security is only entitled and obliged to render performance towards the creditor shown in the ledger (presentational effect). On the other hand, according to Art. 973e para. 2 CO, the debtor is only released by rendering performance to the creditor designated in the ledger, even if said creditor is not the actual creditor (legitimation effect). Moreover, the bona fide acquirer of a ledger-based security is protected in his acquisition pursuant to Art. 973e para. 3 CO (protection of bona fide).

According to Art. 973e para. 4 CO, a debtor may raise against a claim deriving from a ledger-based security only those objections which:

- Are aimed at contesting the validity of the registration or derive from the securities ledger itself or its accompanying data
- He or she is personally entitled to raise against the current creditor of the ledger-based security; or
- Are based on the direct relations between the debtor and a former creditor of the ledger-based security, if the current creditor intentionally acted to the detriment of the debtor when acquiring the ledger-based security

## Requirements for the securities ledger

The requirements of the securities ledger can be summarised as follows:

- Power of disposal (Art. 973d para. 2 point 1)
- Integrity (Art. 973d para. 2 point 2 CO); and

- Publicity (Art. 973d para. 2 points 3 and 4)

### Power of disposal

With regard to the aspect of power of disposal, exclusive power of disposal over the ledger-based securities is required. In other words, the creditors must be able to dispose over the ledger-based securities in a manner similar to disposing over an object. Furthermore, the debtor's power of disposal over the ledger-based security must be mandatorily excluded (Art. 973d para. 2 no. 1 CO). The power of disposal by creditors to the exclusion of the debtor distinguishes itself from purely centrally managed ledgers, which are already covered by the Intermediated Securities Act today.

### Integrity

With regard to the integrity of the ledger, it is required that technical and organisational measures are created so that the legal situation can be correctly reflected. It must not be possible to make unilateral changes to the data and operations of the ledger. For example, it must not be possible for a party to independently effect unauthorised changes in the transaction history or to initiate an unintended redistribution of the ledger-based security.

### Publicity

The content of the rights, the functioning of the ledger and the registration agreement are recorded in the ledger or in linked accompanying data.

The ledger must provide information about the securitised right. The content of the right (amount of the claim, due date, etc.) must be recognisable from the ledger in order to be tradable. The registration agreement as well as the functioning of the ledger, i.e. the way in which bookings are executed, must also be clear and transparent for the parties.

Not all information must necessarily be displayed in the ledger itself. It is also permissible to link readable accompanying data (e.g. a white paper, articles of association, prospectuses, etc.) to the ledger. However, the link must be effected in a technical manner and as a result the basic information must be resistant to manipulation.

The parties must have access to the relevant entries in the ledger. This also means that the parties must be able to check the integrity of the entries relating to them without the involvement of third parties (including the debtor). Despite the technology-neutral wording, the reference to a central feature of DLT and in particular blockchain technologies is recognisable.

### Obligations of the debtor in connection with the securities ledger

According to Art. 973d para. 3 CO, the debtor must ensure that the securities ledger is organised in accordance with its intended purpose. In particular, it must be ensured that the ledger operates in accordance with the registration agreement at all times.

## **The transfer of the ledger-based security**

Pursuant to Art. 973f para. 1 CO, the transfer of the ledger-based security is subject to the provisions of the registration agreement and thus the intention of the parties.

Unlike, for example, the transfer of uncertificated securities (Art. 973c para. 4 CO), the transfer of a ledger-based security does not require a written deed of assignment. A valid legal basis (e.g. a purchase agreement) as well as the actual transfer of the ledger-based security via the security ledger is sufficient for the transfer.

According to Art. 973g para. 1 CO, a collateral (e.g. a lien or a usufruct) can also be established without transferring the ledger-based security if the collateral is visible in the ledger and at the same time it is guaranteed that only the recipient can dispose of the ledger-based security in the event of default.

## **DLT shares**

The issuance of DLT shares by Swiss stock corporations is now possible, as mentioned at the beginning, by the amendment of Art. 622 para. 1 CO.

According to the revised provisions, the articles of association may stipulate that the shares may be issued as uncertificated or ledger-based securities in accordance with Art. 973c CO or 973d CO or as intermediated securities in accordance with the FISA.

The requirement of a statutory basis creates transparency, but also prevents the board of directors from introducing shares in the form of ledger-based securities against the will of the shareholders. The articles of association can either provide for the direct linking of the shareholder position with a token or authorise the board of directors to tokenise the shares.

The responsibility for the choice of ledger technology as well as for the safety, quality and compliance with further conditions lies with the company. This also includes the design of the ledger technology in such a way that, for example, in the case of a statutory restriction on the transfer of registered shares, transfers of the shares issued as ledger-based securities are not possible without the prior consent of the company.

Finally, it should be noted that the securities ledger within the meaning of Art. 973d CO can also act simultaneously as an electronically maintained share register, register of bearer shareholders and/or register of beneficial owners reported to the company, and consequently the management of separate registers is no longer required. The only requirement for this is that the securities ledger also fulfils the corresponding legal requirements (cf. Art. 686 and 697f CO).

## **Changes due to the DLT bill that are not yet in force**

With the full entry into force of the DLT bill, provisions in other acts will also be amended, abolished and/or newly introduced. This affects the DEBA, the FinSA, the NBA, the BankA, the FinIA, the AMLA, the FISA, and FinMIA.

The amendment to the FinMIA provides, for example, for a new authorisation category for trading platforms on which DLT securities are traded. In this respect, the licensing requirements and obligations pursuant to Art. 4 et seq. FinMIA are extended to such DLT trading systems and are applied accordingly.

The remaining provisions of the DLT bill are expected to take effect on 1 August 2021.

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No legal or tax advice

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