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## How Can Collateral Management Benefit from DLT?

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### 4.1 Exposure Layer

Exposures regularly arise through a variety of underlying financial market activities such as securities lending or repo transactions, OTC swap exposures, CCP exposures or monetary policy refinancing operations. In general, they define risks against a counterparty and are expressed in a cash equivalent value that needs to be collateralized. The present report only looks at exposures between financial institutions.

### 4.2 Custody Layer

In order to secure exposures resulting from financial transactions it is necessary to make collateral available to the respective counterparties. Within the existing market frameworks, eligible collateral which is safekept in accounts at custodians is transferred from the collateral giver to the collateral taker. For this purpose, multiple parties of the custody chain of both the collateral giver and the collateral taker are required to take action.

In the analyzed model the TTP is introduced as a new actor who creates the link between the traditionally issued securities and their tokenized version on DLT. As such the traditional custodian will provide its services – simply said – only to a new customer, the TTP. To allow a wide spectrum of securities the TTP might open accounts with multiple CSDs or global custodians. These accounts could be omnibus accounts as well as segregated accounts depending on local market practices or regulatory requirements.

The initial provision of securities would still need to be performed according to already-established processes and criteria as defined by collateral takers. However, the securities need only to be moved once from the collateral giver's account to the account of the TTP. This can be done as a direct transaction or through triparty services offered by the custodian. Those triparty services comprise in particular the valuation, automatic allocation and substitution of collateral, the triggering of margin calls as well as the release of excess collateral. Once the securities are tokenized, representative tokens can be transferred and re-used without involving custodians or triparty agents.

#### **Outlook: Considerations Regarding Custody for Digital Securities**

In contrast to securities issued in the traditional way, in the future it can be expected that securities will be issued directly as a native token on a distributed ledger. The safekeeping, transfer and asset servicing for these digital securities (crypto custody) will imply changes for a custodian. While in conventional custody business physical or de-materialized certificates need to be stored and serviced, in the evolving world of digital securities the storage and management of cryptographic keys becomes an important service. In principle, participants of a DLT network can store their private keys themselves. However, this requires high IT security standards and reliable key backup and recovery procedures. Additionally, it becomes even more cumbersome if access to multiple DLT networks for different assets is needed.

It is rather expected that dedicated crypto custody providers which access multiple DLT networks will emerge. Those would allow their customers to hold assets on these networks and store the respective keys. Although currently lawmakers and regulators are still in the process of defining rules for crypto

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