



Press Release

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Commerzbank, KfW and MEAG simulate security transaction via Blockchain

- **Money market instrument replicated through Blockchain**
- **Significant potential for efficiency gains in the securities business**
- **Real-time posting can allow for reduced capital and liquidity costs**

Commerzbank, KfW Banking Group and MEAG, the asset manager of Munich Re and ERGO, have jointly traded a Euro Commercial Paper (ECP) issued by KfW, and simultaneously replicated the transaction in a Blockchain. Blockchain or distributed ledger technologies build a decentralised data structure and found the basis for intelligent electronic contracts, so called “Smart Contracts”, which focus on the automated processing of business transactions. The security was sold to MEAG, and settled without a paying agent or a clearing system. This pilot transaction comprised a €100,000 issuance volume with a five-day term.

In parallel to issuance and settlement, key transaction elements were replicated and simulated by means of distributed ledger technology, using the R3 Corda platform. For this purpose, the standard number of required intermediaries was reduced, this allowed for an immediate posting. In parallel a real-time replication of the transaction was done using distributed ledger technology. Normally, securities settlement and related payments require two days, due to the restrictions imposed by clearing systems which necessitate deferred timing.

Since 2015, Commerzbank has been involved in an initiative launched by technology firm R3. This initiative explores applications for distributed ledger technologies in the financial services industry. Commerzbank had also, in cooperation with other banks and R3, developed an initial prototype of the Corda based platform. This pilot transaction, using a money market instrument, was realised via an extension of this application, which provides additional functionality. For instance, individual transaction steps can be made transparent through a real-time visualisation, which also provides a basis for a regulatory reporting.

Given their short terms and simple structures, money-market instruments qualify to issuance and trading using distributed ledger technology. With this pilot transaction, the institutions involved have now



simultaneously simulated key elements of a real transaction with several counterparties via a Blockchain. Looking to the future, the option of immediate securities settlement may offer significant benefits. Firstly, a more streamlined transaction processes and a reduced number of intermediaries can offer efficiency gains. Secondly, a same day value date can reduce settlement risk, thus providing relief in terms of capital. As money-market instruments are usually traded in high volumes, a marked reduction in capital and liquidity costs can be expected. However, to fully realise these efficiency gains it will require further technical, regulatory and legal adjustments.

The development of the market readiness of the new platform will be gradually progressed over the coming years. A particular focus is on embedding distributed ledger technology in the regulatory framework, as well as adjustments with regards to the securities law. At the same time, this will involve further development of existing regulatory reporting interfaces.

"The pilot transaction has demonstrated that the issuing as well as the trading of securities can be simulated in real time via Blockchain technology. Transforming securities transactions into digital issues may open up significant potential for efficiency gains", said Roman Schmidt, Commerzbank's Divisional Board member for Corporate Finance.

Dr Frank Wellhöfer, Managing Director for Investment Controlling, Back Office and IT at MEAG, said: "This project has allowed us to analyse from an investor's perspective the impact of blockchain technology on front and back-office processes, and regulatory aspects. The future belongs to digital business processes. The potential efficiency gains and cost benefits are already highly attractive when looking at existing processes; the opportunities offered by the further development of our processes promise additional revenues for our clients."

"Advancing digitalisation will have a significant impact on the manner in which financial markets transactions will be traded and settled in the future. As a major player on the international money and capital markets, KfW believes that Blockchain technology holds significant potential. With this pilot transaction, we have been able to gather initial positive experience in practice. Looking forward, we anticipate benefits in terms of settlement speeds, transparency, and high security standards", said Dr Frank Czichowski, Treasurer of KfW.

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About Commerzbank

Commerzbank is a leading international commercial bank with branches and offices in almost 50 countries. In the two business segments Private and Small Business Customers, as well as Corporate Clients, the Bank offers a comprehensive portfolio of financial services which is precisely aligned to the clients' needs. Commerzbank finances 30% of Germany's foreign trade and is leading in financing for corporate clients in Germany. Due to its in-depth sector know-how in the German economy, the Bank is a leading provider of capital market products. Its subsidiaries Comdirect in Germany and mBank in Poland are two of the world's most innovative online banks. With approximately 1,000 branches, Commerzbank has one of the densest branch networks among German private banks. In total, Commerzbank serves more than 18 million private and small business customers, as well as more than 60,000 corporate clients, multinationals, financial service providers, and institutional clients. The Bank, which was founded in 1870, is represented at all the world's major stock exchanges. In 2016, it generated gross revenues of €9.4 billion with approximately 49,900 employees.

About MEAG

MEAG stands for best practice asset management for Munich Re and ERGO. MEAG has representations in Europe, Asia and North America and also offers its extensive know-how to institutional investors and private clients from outside the Group. MEAG currently manages assets to the value of around € 252 billion.

About KfW Group

KfW is one of the world's leading promotional banks. With its decades of experience, KfW is committed to improving economic, social and ecological living conditions across the globe on behalf of the Federal Republic of Germany and the federal states. To do this, it provided funds totalling EUR 81.0 billion in 2016 alone; and of this, 44 % went into measures for protecting the environment and combating climate change.

KfW does not have any branches and does not hold customer deposits. It refinances its promotional business almost entirely through the international capital markets. In 2016 KfW raised EUR 72.8 billion for this purpose. In Germany, the KfW Group is represented in Frankfurt, Berlin, Bonn and Cologne. Its network includes 80 offices and representations around the world.

Disclaimer

This release contains forward-looking statements. Forward-looking statements are statements that are not historical facts. In this release, these statements concern inter alia the expected future business of Commerzbank, efficiency gains and expected synergies, expected growth prospects and other opportunities for an increase in value of Commerzbank as well as expected future financial results, restructuring costs and other financial developments and information. These forward-looking statements are based on the management's current plans, expectations, estimates and projections. They are subject to a number of assumptions and involve known and unknown risks, uncertainties and other factors that may cause actual results and developments to differ materially from any future results and developments expressed or implied by such forward-looking statements. Such factors include the conditions in the financial markets in Germany, in Europe, in the USA and other regions from which Commerzbank derives a substantial portion of its revenues and in which Commerzbank holds a substantial portion of its assets,



the development of asset prices and market volatility, especially due to the ongoing European debt crisis, potential defaults of borrowers or trading counterparties, the implementation of its strategic initiatives to improve its business model, particularly to reduce its ACR portfolio, the reliability of its risk management policies, procedures and methods, risks arising as a result of regulatory change and other risks. Forward-looking statements therefore speak only as of the date they are made. Commerzbank has no obligation to update or release any revisions to the forward-looking statements contained in this release to reflect events or circumstances after the date of this release.