HISTORY OF KELER



Központi Elszámolóház és Értéktár (Budapest) Zrt.

12 October 1993 - Establishment of KELER, antecedents:

- In domestic financial services the establishment of the two tier banking system (1987), the foundation of the Budapest Stock Exchange (BSE) and the Budapest Commodities Exchange (BCE) (1990) paved the way for the foundation of KELER in October 1993.
- At the time of establishment KELER (share capital at foundation: HUF 500 million) took over depository activity, maintenance of securities account and the settlement of stock exchange securities transactions from the Budapest Stock Exchange.

1994

- KELER took over from BCE the settlement of commodities exchange transactions, this
 allowed to create a settlement system much more efficient and faster than earlier that
 provided settlement on the day of trading, stock exchange accounts of BCE members were
 also taken over from OKHB and at the same time KELER offered the service of maintaining
 stock exchange accounts.
- Creation and launch of limited cash management system of KELER.
- Settlement of the futures market of the BSE.
- OTC government securities settlement services offered, DVP settlement, creation of KELER-National Bank of Hungary (NBH) direct link.
- Regarding the settlement of BSE cash transactions DVP settlement is offered between BSE members.
- **1995** After foundation the company paid attention to establish new services of high quality. This year was characterized by the expansion of services created and launched at a great pace, the turnover of KELER increased several fold.
- Taking over the stock exchange account of BSE members from the NBH.
- Launch of the futures market of BSE, at the same time standardized futures settlement services are offered to BSE members.
- KELER is declared a National Depository by the State Securities and Exchange Supervision.
- KELER received the eligible depository title pursuant to section 17f-5 of the Investment Company Act governing US investment companies. This increased considerably the international acceptance and recognition of KELER.
- On 1 March 1995 Treasury is created.
- The direct NBH-KELER cash management link allowing government securities settlements prebooking, value dating is created.
- OTC government securities settlement becomes the settlement service of largest volume offered by KELER.

- KELER opened an account with international clearing house CEDEL Bank S.A., in the course of this year CEDEL selected KELER as its custodian in Hungary, this made the relationship two-way.
- The Association of National Numbering Agencies (ANNA) accepted KELER as a member.
- KELER is given ISIN status in Hungary.
- Share registry services are offered.

- The BSE becomes one of the most favored market in the region, the leading 8-10 equities are considered "European" securities by investors in terms of both quality and liquidity.
- Customer communication system (KID) goes live.
- Several OTC government securities settlements are offered a day.
- · Professional liability insurance is taken out.
- KELER is the Hungarian custodian in the New York Stock Exchange listing program of MATÁV Rt..
- ISINs of exclusive use are offered to differentiate securities series.

1998

- With the conversion of KELER equities the first dematerialized securities are created in Hungary.
- KELER started to settle futures based options listed on the BCE.
- With the use of the SPAN margin calculation software developed by the CME (Chicago Mercantile Exchange) portfolio based collateral calculation is started.
- The Central and Eastern European Central Securities Depository Association (CEECSDA)
 is created. The founding members decided the seat of the organization is Budapest, Mr.
 Gergely Horváth, then General Manager of KELER is mandated secretary general of the
 organization.
- DVP settlement of government securities issuance is started.
- Start of settlement of BSE listed transactions with so-called gross settlement (fix price transactions).
- With the participation of the BCE, KELER and several European, Asian and African stock exchanges the Association of Future Markets (AFM) is established.
- OeKB (Oesterreichische Kontrollbank), the Austrian central clearing house opened a securities account with KELER.

1999

- As one of the most important developments of the year, in the framework of the KELER 2000 project on 6 September the real time gross settlement system (VIBER) is launched. A special feature of the project is that VIBER was created in line with and launched at the same time as the RTGS cash clearing system of the NBH.
- BSE playing a central role in the domestic securities market infrastructure and KELER launched a joint project to complete the tasks related to year 2000 (1 July 1999).
- As of 25 June 1999, similar to the products traded on the BSE, KELER introduced net
 margining for products traded on the BCE also, that is netting by client, within the expiry
 date is applied when defining collaterals for portfolios.
- KELER extended same day DVP settlement to government securities and all stock exchange listed and OTC securities acceptable in KID (12 April 1999).
- ECOFEX (European Committee of Options and Futures Exchanges) accepted KELER as observing member at the ECOFEX Conference (12 March 1999).

- By the end of the year the goals defined in the KELER 2000 strategic project accepted in 1996 were gradually achieved with the assistance of the middleware technology.
- Following development of almost one year KELER successfully launched the automated cross-border settlement system in December.
- One of the most important events of year 2000 was the new derivative settlement system (DER) of KELER going live on 4 December.
- At the end of the year the first BSE listed equities were dematerialized.

- In the field of stock exchange settlements following the segregation of government securities settlement in 1999, in 2000 the trading and settlement of the T+5 cycle were also segregated.
- This year the regulations and technical conditions of securities lending were created. "Pool" based lending, as an extension to the earlier government securities lending system is automatically launched in case of insufficient securities cover arising in stock exchange multinet settlement.
- From March 2000 the NBH regularly makes auctions on bonds issued by the NBH of one year tenor. KELER undertakes related settlement real time and with gross settlement.

- As a result of the developments completed at the end of the year financial settlement of transactions with gross DVP settlement can be made not only in HUF but in any currency that is considered settlement currency in the system of KELER (settlement currencies at launch: EUR, USD, CZK, JPY, PLN, CHF, SEK, SKK).
- Following foreign exchange liberalization measures in 2001, as the first step of a project KELER established foreign exchange account maintenance system (DNR). This system provided the IT base for KELER to manage international (cross-border) DVP transaction settlement.
- By the end of the year the opportunity to terminate the US tax deductions most disadvantageous for our account holders was elaborated. In response to the requirements of this new scheme other systems at KELER became able to manage several nostro accounts at the same time.
- The well-known US professional paper eAl Journal (e-Business and Application Integration Journal) elected the system built on the IBM MQSeries message management middleware operated at KELER the Best Application Integration Solution 2001.
- The financial section of the BCE terminated open outcry trading and started trading with real time KELER link.
- The order of using and making contribution to the Exchange Settlement Fund (TEA) and the Debt Securities TEA were changed: use can be broken down by defaulting and performing member.
- Another change regarding stock exchange settlement is that in addition to government securities corporate bonds and other debt securities are settled by KELER with T+2 net settlement.

- T+3 settlement cycle introduced on 18 November 2008 for stock exchange settlement of equities.
- In relation to the launch of T+3 the daily mark-to-market of collaterals at the prevailing market rates is launched as a new service.
- The shortened settlement cycle of equities at the stock exchange influenced the management of corporate actions also. From November 2002 the so-called cum-date changed from E-10 (10th business day prior to the corporate action) to E-8, as from the due date only 3 days are required for settlement instead of the earlier 5 days.
- With significant restructuring of the management of securities defaults KELER achieved the goals as follows:
 - In line with the new act on capital markets, in addition to pool and trilateral lending a new lending service was finalized where KELER participates as a central counterparty.
 - A change to services related to domestic securities to be emphasized for foreign partners is that by making use of the opportunity provided by laws, and to the best of our knowledge for the first time in Hungary, KELER acts as nominee for the clients using this service.
 - From 13 May 2002 KELER extended CCP (central counterparty) services to cash transactions also, earlier it was provided on the derivative market only.

- The Business Continuity Plan (BCP) of KELER was finalized and became effective in October 2003, the BCP focused on processes and resources that were considered critical from the point of view of KELER operation.
- From 2003 issuers of equities and issuers of bonds also can use the shareholders registration services offered by KELER.

2004

- By the end of the year the back up systems of KELER went live.
- This year the clearing membership system was developed: trading membership and clearing membership were made independent, non-clearing member trading data are transmitted real time to the general clearing member, and own/client segregation was created for the entire processing. With these developments KELER became ready for stock exchange distance trading membership.
- From 1 January 2004 KELER operates as a Specialized Credit Institution.

2005

- In September 2005 the management organs of the Budapest Stock Exchange and the Budapest Commodities Exchange accepted the integration agreement concluded by the two institutions.
- The two markets were joined in practice by the assignment of operation. KELER played an
 important role in the execution of the integration as in addition to the settlement and
 technical tasks to be completed the collateral systems related to clearing house guarantee
 undertaking had to be standardized.
- On the OTC gross settlement market KELER launched on the one hand the so-called "hold/release" service already available in certain developed markets, on the other it provided for the uniform settlement of Free of Payment securities transfers and Delivery Versus Payment settlements.
- This year direct, automatic link to the system of KELER could be made from client back offices, as a result so-called "straight-through processing" (STP) is available for defined services of KELER that are continuously extended.

2006

- The most important development of the year is the field extension completed in the systems
 of KELER that became necessary due to the increase in the quantity and nominal value of
 securities issued.
- During development of services in 2006 KELER extended multinet settlement to BSE listed ETF (Exchange Traded Fund) securities and created Delivery-Versus-Delivery (DVD) transaction type to support settlement between the issuer of the ETF and the market maker.
- The futures gold contract with physical and cash settlement was listed on the exchange.
- With the purchase price repayment to non-defaulting buyers involved in the default process the default management of KELER became more sophisticated.
- The efficiency of cross-border services increased significantly: with the automation on the one hand of XETRA settlements and on the other the processing of foreign corporate actions.

- In the autumn of 2007 the DECAGON project (HR project) was launched to create
 the human resources strategy of KELER in line with the expectations of management and
 employees.
- This year the (Development Process Survey) project was launched to create the new methodology of portfolio and project management and of application development processes.
- The KELER Transformation project was launched as at the ordinary General Meeting of 2007 a decision was made on the method of transformation.

- One of the most important improvements of this year was the extension of real time risk management to the cash market of the BSE.
- At the beginning of July 2007 a successful DRP (Disaster Recovery Plan) test was completed at the backup site of KELER in Ciprus utca.
- In the autumn of 2007 trading in warehouse warrants started in the Commodities Section of the BSE, thus KELER created the order and conditions of warehouse warrant custody and settlement.
- In 2007 KELER completed a formal customer satisfaction survey for the first time in its operation based on personal interviews and questionnaires.
- The working groups of industrial associations finalized the document that defines the
 practical principles of accessibility and interoperability of the Code of Conduct that was also
 accepted and signed by KELER.

- In the spring of 2008 the DECAGON project and the organizational restructuring of KELER were finalized, during these projects KELER established and introduced the most important HR systems in KELER.
- From 6 February 2008 "investment" and "turbo" certificates can be traded also in the Equities Section of the cash market of the BSE.
- In the spring of 2008 the 3F project was completed and the Program Office was launched. The methodology of project and portfolio management was created and the methodology of application development introduced, the necessary development and test environments are expected to be set up until the end of 2009.
- In May 2008 with the involvement of its employees KELER renovated a kindergarten for socially disadvantaged children in Kiskőrös.
- On 30 June 2008 KELER KSZF was established, operation is started on 1 January 2009.
- During the year KELER implemented the management of BCP, DRP and IT security risk analysis and risk management processes in Carisma software, Carisma was launched.
- In September 2008 KELER prepared the General Implementation Report that contains the main actions taken to meet the requirements of the Code of Conduct and the Selfassessment reports on price transparency, accessibility and interoperability.
- On 12 October 2008 KELER is celebrating its 15th birthday.
- During 2008 preparations were made to get ready for the introduction of the virtual system environment of KELER.

- As of 1 January 2009 KELER KSZF Központi Szerződő Fél Kft., where the majority shareholder is KELER Zrt. and the BSE has a minority share also, is acting as the central counterparty.
- During 2009 the transformation and update of the IT infrastructure was continuous in order to ensure that an IT system that is easier to operate than the current system and guarantees increased availability, scaleable and cost efficient is supporting the business processes. KELER is establishing a virtual system environment to achieve this goal.
- In May 2009 KELER hosted the bi-annual conference of clearing houses and securities depositories (CSDs) of the world that turned out to be the most successful CSD conference ever.
- In order to meet the requirements of market participants and the guidelines of the Code of Conduct in the future clearing and settlement services are to be segregated to ensure that these services are available for customers separately. The clearing and settlement systems were segregated in the autumn of 2009.
- In June 2009 with the involvement of its employees KELER renovated a children camp in Velence.
- In 2009 KELER made available the service of releasing ISINs on the Internet, this service will go live when regulatory requirements are met.
- During 2009 forum for local custodies has started under organization of KELER.
- In 2009 KELER for the second time completed a formal customer satisfaction survey second time for the first time in its operation based on personal interviews and questionnaires.