INTRODUCTION .................................................................................................................................. 3

SECTION A: THE CSD LANDSCAPE IN EUROPE .............................................................................. 4

1. LEGAL FRAMEWORK .................................................................................................................. 4
   1.1 Countries covered ...................................................................................................................... 4
   1.2 Applicable standards ................................................................................................................ 4
   1.3 Settlement systems .................................................................................................................. 5

2. CORPORATE GOVERNANCE .................................................................................................... 7
   2.1 Ownership models ................................................................................................................... 7
   2.2 Employment ............................................................................................................................ 9

3. SERVICES ................................................................................................................................... 11
   3.1 Financial instruments accepted for settlement ....................................................................... 11
   3.2 National numbering agencies .................................................................................................. 11
   3.3 Legal Entity Identifier (LEI) .................................................................................................... 12

4. USERS ....................................................................................................................................... 13
   4.1 Participants .............................................................................................................................. 13
   4.2 CSD account structures ......................................................................................................... 14
   4.3 New issues and redemptions ................................................................................................. 15

5. SECURITIES TRANSACTIONS .................................................................................................. 16
   5.1 Securities held in CSDs .......................................................................................................... 16
   5.2 Delivery instructions .............................................................................................................. 16
<table>
<thead>
<tr>
<th>Country</th>
<th>Stock Exchange/CSD</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>OeKB</td>
<td>19</td>
</tr>
<tr>
<td>BA/RS</td>
<td>Central Registry of Securities JSC Banja Luka (CR HoV RS)</td>
<td>20</td>
</tr>
<tr>
<td>BA</td>
<td>Registry of Securities (RVP)</td>
<td>21</td>
</tr>
<tr>
<td>BE</td>
<td>BNY Mellon CSD</td>
<td>22</td>
</tr>
<tr>
<td>BE</td>
<td>Euroclear Bank</td>
<td>23</td>
</tr>
<tr>
<td>BE</td>
<td>Euroclear Belgium</td>
<td>24</td>
</tr>
<tr>
<td>BG</td>
<td>Central Depository AD (CDAD)</td>
<td>25</td>
</tr>
<tr>
<td>CH</td>
<td>SIX SIS</td>
<td>26</td>
</tr>
<tr>
<td>CY</td>
<td>Cyprus Stock Exchange (CSE)</td>
<td>27</td>
</tr>
<tr>
<td>CZ</td>
<td>Central Securities Depository Prague (CSD Prague)</td>
<td>28</td>
</tr>
<tr>
<td>DE</td>
<td>Clearstream Banking Frankfurt (CBF)</td>
<td>29</td>
</tr>
<tr>
<td>DK</td>
<td>VP Securities</td>
<td>30</td>
</tr>
<tr>
<td>EE</td>
<td>Estonian CSD</td>
<td>31</td>
</tr>
<tr>
<td>ES</td>
<td>Iberclear</td>
<td>32</td>
</tr>
<tr>
<td>FI</td>
<td>Euroclear Finland</td>
<td>33</td>
</tr>
<tr>
<td>FR</td>
<td>Euroclear France</td>
<td>34</td>
</tr>
<tr>
<td>GR</td>
<td>Hellenic Central Securities Depository (ATHEXCSD)</td>
<td>35</td>
</tr>
<tr>
<td>HR</td>
<td>Central Depository &amp; Clearing Company (SKDD)</td>
<td>36</td>
</tr>
<tr>
<td>HU</td>
<td>KELER</td>
<td>37</td>
</tr>
<tr>
<td>IS</td>
<td>Icelandic Securities Depository (ISD)</td>
<td>38</td>
</tr>
<tr>
<td>IT</td>
<td>Monte Titoli</td>
<td>39</td>
</tr>
<tr>
<td>LT</td>
<td>Central Securities Depository of Lithuania (CSDL)</td>
<td>40</td>
</tr>
<tr>
<td>LU</td>
<td>Clearstream Banking Luxembourg (CBL)</td>
<td>41</td>
</tr>
<tr>
<td>LU</td>
<td>LuxCSD</td>
<td>42</td>
</tr>
<tr>
<td>LV</td>
<td>Latvian Central Depository (LCD)</td>
<td>43</td>
</tr>
<tr>
<td>ME</td>
<td>Central Depository Agency (CDA) of Montenegro</td>
<td>44</td>
</tr>
<tr>
<td>MK</td>
<td>CSD AD Skopje</td>
<td>45</td>
</tr>
<tr>
<td>MT</td>
<td>Malta Stock Exchange (MSE)</td>
<td>46</td>
</tr>
<tr>
<td>NL</td>
<td>Euroclear Nederland</td>
<td>47</td>
</tr>
<tr>
<td>NO</td>
<td>VPS</td>
<td>48</td>
</tr>
<tr>
<td>PL</td>
<td>KDPW</td>
<td>49</td>
</tr>
<tr>
<td>PT</td>
<td>Interbolsa</td>
<td>50</td>
</tr>
<tr>
<td>RO</td>
<td>Depozitarul Central</td>
<td>51</td>
</tr>
<tr>
<td>RS</td>
<td>Central Securities Depository and Clearing House (CR HoV)</td>
<td>52</td>
</tr>
<tr>
<td>RU</td>
<td>National Settlement Depository (NSD)</td>
<td>53</td>
</tr>
<tr>
<td>SE</td>
<td>Euroclear Sweden</td>
<td>54</td>
</tr>
<tr>
<td>SI</td>
<td>Central Securities Clearing Corporation (KDD)</td>
<td>55</td>
</tr>
<tr>
<td>SK</td>
<td>Central Securities Depository of the Slovak Republic (CDCP SR)</td>
<td>56</td>
</tr>
<tr>
<td>TR</td>
<td>Central Securities Depository of Turkey (MKK)</td>
<td>57</td>
</tr>
<tr>
<td>UA</td>
<td>National Depository of Ukraine (NDU)</td>
<td>58</td>
</tr>
<tr>
<td>UK</td>
<td>Euroclear UK &amp; Ireland (EUI)</td>
<td>59</td>
</tr>
</tbody>
</table>

ANNEX: METHODOLOGY .................................................................60
Introduction

This Factbook contains two sections:

- Section A provides an overview of the CSD landscape in Europe. The analysis, based on 2013 data from the ECSDA online database, looks at different aspects of CSD activities: (1) the legal framework, (2) corporate governance, (3) CSD services, (4) users and (5) securities transactions.

- Section B contains 41 factsheets with basic facts and figures on individual ECSDA members. The information contained in these factsheets is simplified in order to facilitate comparability, so we strongly encourage readers who would like to find out more about an individual CSD to visit this CSD’s website, indicated on the top of each factsheet.

For the purpose of this report, the term "CSD" covers both national and international central securities depositaries, unless otherwise specified. CSDs are mostly referred to using their short names (see Table 1).

Table 1. List of ECSDA members

<table>
<thead>
<tr>
<th>Country</th>
<th>Short name</th>
<th>Country</th>
<th>Short name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>OeKB</td>
<td>LT</td>
<td>CSDL</td>
</tr>
<tr>
<td>BA</td>
<td>CR HoV RS</td>
<td>LU</td>
<td>CBL</td>
</tr>
<tr>
<td>BA</td>
<td>RVP</td>
<td>LU</td>
<td>LuxCSD</td>
</tr>
<tr>
<td>BE</td>
<td>BNY Mellon CSD</td>
<td>LV</td>
<td>LCD</td>
</tr>
<tr>
<td>BE</td>
<td>Euroclear Bank</td>
<td>ME</td>
<td>CDA</td>
</tr>
<tr>
<td>BE</td>
<td>Euroclear Belgium</td>
<td>MK</td>
<td>CSD AD Skopje</td>
</tr>
<tr>
<td>BG</td>
<td>CDAD</td>
<td>MT</td>
<td>MSE</td>
</tr>
<tr>
<td>CH</td>
<td>SIX SIS</td>
<td>NL</td>
<td>Euroclear Nederland</td>
</tr>
<tr>
<td>CY</td>
<td>CSE</td>
<td>NO</td>
<td>VPS</td>
</tr>
<tr>
<td>CZ</td>
<td>CDCP</td>
<td>PL</td>
<td>KDPW</td>
</tr>
<tr>
<td>DE</td>
<td>CBF</td>
<td>PT</td>
<td>Interbolsa</td>
</tr>
<tr>
<td>DK</td>
<td>VP</td>
<td>RO</td>
<td>Depozitarul Central</td>
</tr>
<tr>
<td>EE</td>
<td>ECSD</td>
<td>RS</td>
<td>CR HoV</td>
</tr>
<tr>
<td>ES</td>
<td>Iberclear</td>
<td>RU</td>
<td>NSD</td>
</tr>
<tr>
<td>FI</td>
<td>Euroclear Finland</td>
<td>SE</td>
<td>Euroclear Sweden</td>
</tr>
<tr>
<td>FR</td>
<td>Euroclear France</td>
<td>SI</td>
<td>KDD</td>
</tr>
<tr>
<td>GR</td>
<td>ATHEXCSD</td>
<td>SK</td>
<td>CDCP SR</td>
</tr>
<tr>
<td>HR</td>
<td>SKDD</td>
<td>TR</td>
<td>MKK</td>
</tr>
<tr>
<td>HU</td>
<td>KELER</td>
<td>UA</td>
<td>NDU</td>
</tr>
<tr>
<td>IS</td>
<td>ISD</td>
<td>UK</td>
<td>Euroclear UK &amp; IE</td>
</tr>
<tr>
<td>IT</td>
<td>Monte Titoli</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remark: Please refer to the individual factsheets in Section B for the full name of the institutions.

To view the full ECSDA database online or to download it in Excel, scan this QR code or go to: http://ecesda.eu/facts/2013database
Section A: The CSD landscape in Europe

1. Legal framework

1.1 Countries covered

As of 1 July 2014, ECSDA had 41 member organisations, headquartered in 37 countries across Europe (see Chart 1).

Although the total number of member institutions and countries represented remained stable compared to 2012, the composition of ECSDA members changed in 2013-2014. Settlement Center JSC (Ukraine) and Takasbank (Turkey) both left the association after deciding to focus on their CCP activities. They were replaced by two new member organisations: BNY Mellon CSD (Belgium) and LuxCSD (Luxembourg). This edition of the CSD Factbook reflects these changes in ECSDA membership, and the reader should be aware that the figures for previous years included in this report will sometimes differ from those published in the 2012 CSD Factbook as a result of these adaptations.

With the exception of Ireland, all countries in the European Union have a CSD operating on their territory. Euroclear UK and Ireland, which is headquartered in London, offers CSD services for Irish as well as UK securities. Belgium now hosts three CSDs (in addition to the central bank securities settlement system): Euroclear Belgium, the international CSD Euroclear Bank and BNY Mellon CSD, established in 2013. The other ICSD, Clearstream Banking Luxembourg, is headquartered in Luxembourg, as is LuxCSD, a CSD owned jointly by the Banque centrale du Luxembourg (BCL) and Clearstream International which was established in 2010. VP Luxembourg, a wholly-owned subsidiary of VP Securities, the Danish CSD, is not included in this report as it is not a direct member of ECSDA.

It is worth mentioning that ECSDA’s membership does not include central banks operating their own securities settlement system (typically for government securities).

1.2 Applicable standards

All CSDs in Europe are subject to national laws in the country in which they are incorporated. Quite often, securities law contains a section on the role and responsibilities of the central securities depository. Sometimes, there is even a dedicated legal act on the CSD. In other cases, the CSD is managed as a self-regulatory organisation. In addition to being regulated as central securities depositories, 7 ECSDA members (OeKB, EB, KELER, CBF, CBL, NSD, SIX SIS) operate with a banking license and are therefore also subject to the relevant banking laws.

At European level, the 32 CSDs belonging to the European Economic Area (EEA) are subject to
European regulations, and are designated as “securities settlement systems” (SSS) under the Settlement Finality Directive (SFD) 98/26/EC. Moreover, the CSD Regulation (or “CSDR”), which is due to enter into force on 17 September 2014, introduces a comprehensive set of harmonised requirements for EU CSDs (see Table 2).

With the exception of Euroclear Belgium, all CSDs established in a euro area country are eligible SSSs under the Eurosystem assessment framework, which means that they can be used by their participants for mobilising collateral to secure central bank credit in the context of Eurosystem monetary policy operations. The “User addendum” for assessing SSSs and links within the Eurosystem framework was last updated in January 2014 and replaces the former ESCB User Standards. Eligible CSDs are regularly assessed in terms of their compliance with the Eurosystem framework.

**Table 2. Main European and international rules governing CSD activities**

<table>
<thead>
<tr>
<th>Rules</th>
<th>Author</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settlement Finality Directive</td>
<td>European Union</td>
<td>1998</td>
</tr>
<tr>
<td>Principles for Financial Market Infrastructures</td>
<td>CPSS and IOSCO</td>
<td>2012</td>
</tr>
<tr>
<td>Eurosystem Assessment Framework for SSSs and links</td>
<td>Eurosystem</td>
<td>2014</td>
</tr>
<tr>
<td>CSD Regulation</td>
<td>European Union</td>
<td>2014</td>
</tr>
</tbody>
</table>

Finally, all European CSDs are also subject to international oversight standards elaborated by the Committee on Payment and Settlement Systems (CPSS) and the technical committee of the International Organization of Securities Commissions (IOSCO), representing central banks and securities regulators respectively. In April 2012, CPSS and IOSCO published the Principles for Financial Market Infrastructures (PFMI) which replace the former Recommendations for securities settlement systems, and cover all aspects of CSD activities such as the legal framework, governance, risk management, and efficiency.

### 1.3 Settlement systems

All ECSDA members offer delivery-versus-payment (DvP) settlement as a core service. This means that the transfer of securities from the seller to the buyer only occurs if the payment has been made from the buyer to the seller (and vice-versa). Other types of instructions are possible, such as free of payment transfers (FoP), where a delivery of securities is not linked to a corresponding cash payment (for example, moving securities from one account to another), but the DvP process is essential because it reduces risk in the market. Thanks to the simultaneous and irrevocable transfer of securities and cash, CSD participants have the guarantee that they will not pay for securities without receiving them, and that they will not deliver securities without receiving the corresponding payment.

In practice, the Bank for International Settlements (BIS) identifies three DvP models, as illustrated in Table 3. All BIS models are in use, and it is frequent for a CSD to use more than one model depending on the market it serves. BIS model 1 is also called RTGS or “real-time gross settlement” and is used by the vast majority of CSDs (37 out of 41), either alone (12 CSDs) or in combination with model 2 or 3 (15 and 9 CSDs respectively). Only NSD, the Russian CSD, uses all three models. In cases where more than one model is used, Model 1 is typically used for over-the-counter (OTC) transactions. On-exchange transactions usually involve some

---

form of netting and are thus settled according to Model 2 or 3. Four CSDs (CDAD, ISD, VPS and CR HoV) settle exclusively with Model 2.

**Table 3. BIS settlement models**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SECURITIES TRANSFER</th>
<th>CASH TRANSFER</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL 1</td>
<td>Gross</td>
<td>Gross</td>
</tr>
<tr>
<td>MODEL 2</td>
<td>Gross</td>
<td>Net</td>
</tr>
<tr>
<td>MODEL 3</td>
<td>Net</td>
<td>Net</td>
</tr>
</tbody>
</table>

As of 1 January 2014, 21 ECSDA members had signed the T2S framework agreement with the Eurosystem, which means that they will outsource settlement to a joint technical platform operated by the Eurosystem from June 2015 onwards (depending on the individual migration date). TARGET2-Securities is expected to deliver harmonised DvP settlement in central bank money for most European securities. Among the ECSDA members participating in T2S, 17 are established in the euro area or in a euro accession country (Latvia adopted the euro on 1 January 2014 and Lithuania is due to join the euro area in 2015). 4 CSDs (SIX SIS, VP, KELER, and Depozitarul Central) are established outside the euro area but will settle their EUR transactions in T2S.

In addition to settling euro-denominated securities, T2S will settle in Danish Kroner (DKK) as of 2018, and possibly other currencies in the future. In addition to ECSDA members, 3 other CSDs (the National Bank of Belgium CSD, the Greek central bank CSD BOGS and VPLux) have committed to use the T2S platform. More details on the T2S project and migration plan can be found at [www.t2s.eu](http://www.t2s.eu).
2. Corporate Governance

2.1 Ownership models

Given the diversity of corporate structures and ownership models of CSDs, collecting information on CSD ownership is not an easy task. In order to provide a more accurate picture of CSD owners across Europe, ECSDA decided to refine its methodology as of 2013. Instead of merely looking at the majority shareholder(s) and instead of grouping CSDs into broad categories such as “state-owned”, “user-owned” and “exchange-owned”, ECSDA now asks each CSD to report on the proportion of shares owned by the following six types of entities: state authorities (the Ministry of Finance, for example), central banks, trading venues, CSD participants, private investors (including, for example, institutional investors like sovereign funds, pension funds and insurers) and other entities.

As a result of this methodological change, we are now able to capture more accurately the diversity of CSD ownership structures, but we also face new challenges in aggregating the ownership information collected from all CSDs. One way of looking at the overall picture across Europe is to show the ownership stakes of the different categories of entities for all 41 CSDs put together. This is the approach adopted in Chart 2, which illustrates the proportion of shareholders from different categories in a theoretical CSD, contrasting the prevalent shareholder types in the EU and outside the EU.

**Chart 2. Main shareholder types in European CSDs**

![Diagram showing ownership types in EU and non-EU CSDs]

In the EU, trading venues (primarily stock exchanges) hold by far the largest stake in CSDs, whereas non-EU European CSDs are characterised by a stronger involvement of the state in the CSD capital. In both EU and non-EU CSDs, CSD participants represent on average close to a third of CSD owners, which suggests that user ownership of a CSD is relatively widespread.

Another way to compare CSD ownership models is to look at the majority shareholder(s) in each CSD, as is done in Table 4. This allows us to group CSDs under 5 categories and to make a few observations.
<table>
<thead>
<tr>
<th>Majority shareholder(s)</th>
<th>CSDs</th>
<th>No. of CSDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trading venue (securities exchange)</td>
<td>CSD Prague (100%), CBF (100%), Estonian CSD (100%), Iberclear (100%), ATHEXCS (100%), ISD (100%), CSDL (100%), CBL (100%), LCD (100%), Interbolsa (100%), NSD (100%), CDCP SR (100%), Monte Titoli (98.8%), Depozitarul Central (69%)</td>
<td>14 (34%)</td>
</tr>
<tr>
<td>CSD participants</td>
<td>Euroclear Bank (100%), Euroclear Belgium (100%), Euroclear Nederland (100%), Euroclear Finland (100%), Euroclear France (100%), Euroclear Sweden (100%), EUI (100%), SIX SIS (95.7%), VP (68%), OeKB (62%), CSD AD Skopje (55.1%)</td>
<td>11 (27%)</td>
</tr>
<tr>
<td>The State (state authorities and/or central banks)</td>
<td>CR HoV (100%), CSE (100%), MSE (100%), RVP (75%), SKDD (62.3%), KDPW (66.6%), KELER (53.3%)</td>
<td>7 (17%)</td>
</tr>
<tr>
<td>Other (banks, private investors, CCPs)</td>
<td>BNY Mellon CSD (100% BNY Mellon Corporation), VPS (71.7% various institutional investors), MKK (64.9% Takasbank), KDD (56% banks, management companies etc.)</td>
<td>4 (10%)</td>
</tr>
<tr>
<td>No majority shareholder</td>
<td>CDAD (43% State, 37% CSD participants, 20% others), CR HoV RS (42.5% CSD participants, 33% State, 24.5% Exchange), NDU (50% State and central bank, 50% others), LuxCSD (50% central bank, 50% Clearstream), CDA (40% users, 35% State, 25% private investors)</td>
<td>5 (12%)</td>
</tr>
</tbody>
</table>

When trading venues are acting as shareholders in a CSD, this is usually as full owners, and often as part of an integrated corporate group including one or more exchange(s), clearing house(s) and CSD(s). Overall, among all 41 ECSDA members:

- 12 CSDs are fully owned by an exchange;
- 2 CSDs are majority-owned by an exchange;
- Exchanges hold minority stakes in 5 CSDs (46.7% in KELER, 33.3% in KDPW, 30.1% in MKK, 24.5% in CR HoV RS, 6.6% in CDAD).

Looking at user ownership more in detail, it appears that:

- The 7 Euroclear (I)CSDs are entirely user-owned;
- 1 CSD, SIX SIS is almost entirely user-owned (95.7%) but is part of a corporate group, SIX, which includes a securities exchange;
- 3 CSDs are primarily owned by CSD participants (VP, OeKB, CSD AD Skopje);
- 10 CSDs have CSD participants as minority shareholders (42.5% CR HoV RS, 40% CDA, 37% CDAD, 28.3% VPS, 25.1% Depozitarul Central, 25% RVP, 25% NDU, 21.1% SKDD, 12.7% KDD, 5% MKK);
- 20 CSDs do not have CSD participants as direct shareholders.

State-owned CSDs include different variants, from full state ownership to mixed models. In particular:

- 3 CSDs are fully owned by the State (MSE and CSE are departments of the Stock Exchange, which in turns is fully-owned by the national government);
- 2 CSDs have the government as majority shareholder (RVP, SKDD);
- 1 CSD, KELER, is majority-owned by the central bank (53.3%);
- 1 CSD, KDPW, counts both the central bank and the Ministry of Finance as shareholders, each holding 1/3 of the shares (the Warsaw Stock Exchange being the third shareholder).

Four CSDs are primarily owned by banks or private investors:
- BNY Mellon CSD is 100% owned by BNY Mellon Corporation, a US-based global custodian;
- VPS’ main shareholders include various national and international financial institutions, including asset management and insurance companies;
- MKK is majority-owned by Takasbank-Istanbul Settlement and Custody Bank, which offers CCP and other post trade services in the Turkish market;
- KDD is primarily owned by banks, management companies and other types of investors.

Finally, 5 CSDs have a hybrid ownership structure with no single majority shareholder type. Irrespective of their ownership models, the vast majority of European CSDs (90%) operate as for-profit entities. Only 4 CSDs operate on a not-for-profit basis (RVP, CSE, KDPW, CR HoV).

2.2 Employment

As of 31 December 2013, ECSDA members collectively employed 7,859 people, among which 6,453 in the European Union and 1,406 in European CSDs outside the EU. Overall, this is an increase of slightly more than 3% compared to 2012, after several years of broadly stable employment levels. It can also be noted from Chart 3 that the increase in 2013 was concentrated on EU CSDs, reversing the situation of the years preceding 2012, where more new jobs were created in the CSDs in emerging European markets outside the EU.

**Chart 3: Total number of CSD employees**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>EU CSDs</th>
<th>Other CSDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>7,551</td>
<td>6,218</td>
<td>1,333</td>
</tr>
<tr>
<td>2011</td>
<td>7,590</td>
<td>6,241</td>
<td>1,349</td>
</tr>
<tr>
<td>2012</td>
<td>7,624</td>
<td>6,205</td>
<td>1,419</td>
</tr>
<tr>
<td>2013</td>
<td>7,859</td>
<td>6,453</td>
<td>1,406</td>
</tr>
</tbody>
</table>

Excluding the two ICSDs, the average CSD had slightly more than 100 employees in 2013. This illustrates that the CSD business, unlike the retail banking business for example, is more IT-intensive than human-intensive, and many CSDs qualify indeed as small or medium businesses in their respective country. The range of the figures is broad. While the smallest CSD employed 6 full-time equivalents (FTEs), the largest ICSD had over 2,700 employees.

It is important to note that the employee data reflects various corporate structures and arrangements, and in cases where the CSD is not a separate entity (e.g. when the CSD is a department of the Exchange or when the CSD is part of an integrated corporate group with

---

2 The list of the top 20 shareholders in Oslo Børs VPS Holding ASA is available at: [http://www.osloborsvps.no/obvps_eng/Oslo-Boers-VPS/The-share/Top-20-Shareholders](http://www.osloborsvps.no/obvps_eng/Oslo-Boers-VPS/The-share/Top-20-Shareholders)
shared services among the different businesses of the group), the reported figures reflect an estimate of the actual number of FTEs dedicated to the CSD activity rather than the actual number of employees reported in the financial statements of the corporate entity.
3. Services

3.1 Financial instruments accepted for settlement

CSDs accept a wide variety of financial instruments for deposit and/or settlement. All European CSDs settle equities and, with one exception, they all settle corporate bonds. A vast majority of CSDs also settle government securities (government bonds and Treasury bills). In those markets where government securities are not settled by the CSD, it is usually because there is a dedicated securities settlement system for such securities operated by the central bank. For Treasury bills for instance, this is the case in Belgium, Bulgaria, the Czech Republic, Poland, Romania and Ukraine. More than 80% of CSDs have developed services for mutual funds, not only limited to settlement but also including order routing and valuation services. Other instruments often accepted for settlement include Depository Receipts, cooperative share units, asset backed securities, other structured products and investment certificates.

**Chart 4. Financial instruments accepted for settlement in European CSDs**

<table>
<thead>
<tr>
<th>Financial instrument</th>
<th>Accepted for settlement</th>
<th>Not accepted for settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equities</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>98%</td>
<td>2%</td>
</tr>
<tr>
<td>Government bonds</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Treasury bills</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>Investment funds</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>ETFs</td>
<td>76%</td>
<td>24%</td>
</tr>
<tr>
<td>Warrants and rights</td>
<td>76%</td>
<td>24%</td>
</tr>
<tr>
<td>Greenhouse gas emissions</td>
<td>10%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Compared to the previous year, a few CSDs have extended their settlement services to include additional financial instruments. For instance, KDPW and ATHEXCSd now offer settlement services for investment funds, while Monte Titoli and CSDL now settle commercial paper.

As in 2012, only four CSDs were offering settlement services for emission allowances in the context of the EU greenhouse gas emissions trading system: Euroclear Bank, KELER, Clearstream Banking Frankfurt and Clearstream Banking Luxembourg. Given materially altered carbon market conditions however, these services are currently not actively used by market participants. In Spain, Iberclear does not settle emission rights, but accepts them for deposit at the CSD.

3.2 National numbering agencies

Most European CSDs (33 out of 41) act as national numbering agencies (NNAs), which means that they are responsible for allocating ISIN codes (International Securities Identification Numbers) to new securities. This function reflects the central role played by CSDs in financial

---

3 In Cyprus, the Cyprus Stock Exchange is responsible for auctioning Emission Allowances (EUAs) since 2012. It does not offer, however, a dedicated settlement service for EUA certificates.
markets and in the issuance process in particular.

3.3 Legal Entity Identifier (LEI)

Building on their experience as NNAs, some CSDs are also authorised to allocate Legal Entity Identifiers (LEI) in their market. The global LEI initiative aims to allow for the identification, not of financial instruments, but of financial counterparties to securities and derivatives transactions.

As of end 2013, three ECSDA members (CSD Prague, KDPW and NSD) had been officially authorised to generate and allocate pre-LEI codes to requesting legal entities in their jurisdiction. By mid-2014, two more (CDCP SR and LuxCSD) had obtained a similar authorisation. More details on the global LEI system can be found at: www.leiroc.org
4. Users

4.1 Participants

CSD participants are typically wholesale financial firms. If we exclude the two ICSDs, European CSDs had on average around 114 participants as of end 2013. The number of participants ranges from less than 15 (BNY Mellon CSD, LuxCSD, MSE, CR HoV RS, CSD AD Skopje) to 908 (NSD). Inside the EU, the domestic CSD with the highest number of participants is CBF with 359. The two ICSDs together had 2,774 participants in 2013, slightly less than in 2012.

*Chart 5. Proportion of non-domestic participants per CSD*

<table>
<thead>
<tr>
<th>CSD Name</th>
<th>% non-domestic participants</th>
<th>% domestic participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNYM CSD (BE)</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Euroclear Bank (BE)</td>
<td>98%</td>
<td>2%</td>
</tr>
<tr>
<td>Clearstream LU</td>
<td>92%</td>
<td>8%</td>
</tr>
<tr>
<td>Euroclear NL</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>Euroclear BE</td>
<td>74%</td>
<td>26%</td>
</tr>
<tr>
<td>VPS (NO)</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>CSE (CY)</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>Clearstream DE</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td>SIX SIS (CH)</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>Euroclear FI</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>VP Securities (DK)</td>
<td>37%</td>
<td>63%</td>
</tr>
<tr>
<td>LuxCSD</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>HCSD (GR)</td>
<td>27%</td>
<td>73%</td>
</tr>
<tr>
<td>OeKB (AT), ISD (IS)</td>
<td>26%</td>
<td>74%</td>
</tr>
<tr>
<td>Euroclear FR, Estonian CSD</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Euroclear SE</td>
<td>23%</td>
<td>77%</td>
</tr>
<tr>
<td>Iberclear (ES)</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>LCD (LV)</td>
<td>19%</td>
<td>81%</td>
</tr>
<tr>
<td>CDCP SR, CSDP (CZ)</td>
<td>15%</td>
<td>85%</td>
</tr>
<tr>
<td>CSDL (LT)</td>
<td>14%</td>
<td>86%</td>
</tr>
<tr>
<td>Interbolsa (PT)</td>
<td>11%</td>
<td>89%</td>
</tr>
<tr>
<td>KELER (HU)</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>Depozitarul Central (RO), EUI (UK&amp;IE)</td>
<td>9%</td>
<td>91%</td>
</tr>
<tr>
<td>MSE (MT)</td>
<td>7%</td>
<td>93%</td>
</tr>
<tr>
<td>Monte Titoli (IT)</td>
<td>3%</td>
<td>95%</td>
</tr>
<tr>
<td>SKDD (HR)</td>
<td>2%</td>
<td>97%</td>
</tr>
<tr>
<td>NSD (RU)</td>
<td>1%</td>
<td>98%</td>
</tr>
<tr>
<td>CDAD (BG), KDPW (PL), NDU (UA)</td>
<td>1%</td>
<td>99%</td>
</tr>
<tr>
<td>All other CSDs</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Chart 5 reveals important differences regarding the balance between domestic and non-domestic participants. On average, leaving the ICSDs aside (since they are by nature not operating in a domestic environment), European CSDs had slightly over 23% of non-domestic participants in 2013, down from 26% in the previous year. Not surprisingly, CSDs operating in small countries within the EU tend to have a higher share of non-domestic participants than CSDs operating in...
larger markets and outside the EU. The level of regional integration (e.g. Benelux, Nordics) is also a factor explaining a high proportion of non-domestic participants.

CSDs with the highest proportion of foreign participants in 2013 (excluding the ICSDs and BNY Mellon CSD) were Euroclear Nederland (77%), Euroclear Belgium (74%) and VPS Norway (56%). On the other hand, around 40% of ECSDA members (16 out of 39 CSDs) had fewer than 10% of foreign participants, and 7 CSDs had exclusively domestic institutions as participants. However, if we look at previous years, there seems to be a trend for CSDs in the more domestically-focused markets to attract more foreign institutions as participants. In 2012, more than half of ECSDA members still had less than 10% of non-domestic participants and 10 CSDs had only domestic participants.

4.2 CSD account structures

Although only wholesale financial institutions are typically eligible for CSD participation, in some cases, CSDs maintain end investor accounts in their books. In these so-called “direct holding markets”, end investor accounts are segregated at the level of the CSD and managed through the intermediation of CSD participants acting as account operators. In contrast, in the “indirect holding” or wholesale model, CSD participants maintain omnibus accounts in the CSD and end investor accounts are maintained at a lower level in the securities holding chain (e.g. at the level of the CSD participant).

In a majority of European CSDs (24 out of 41 or 59%), end investor accounts are maintained at the level of the CSD. Not all these CSDs operate a pure direct holding model, and many also offer the possibility to use omnibus accounts, but segregation of end investor accounts at CSD level is generally allowed, encouraged, or even required. Some countries require end investor account segregation by law, at least for domestic shareholders.

The total number of securities accounts held at European CSDs in 2013 was around 80 million (broadly the same as in 2012). This varies however greatly from country to country mainly depending on the account holding model in use (see Tables 5a and 5b).

Table 5a. CSDs with the highest number of securities accounts

<table>
<thead>
<tr>
<th>CSD</th>
<th>Number of securities accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKK (Turkey)</td>
<td>43,010,710</td>
</tr>
<tr>
<td>Depozitarul Central (Romania)</td>
<td>9,090,127</td>
</tr>
<tr>
<td>CR HoV (Serbia)</td>
<td>8,388,970</td>
</tr>
<tr>
<td>VP Securities (Denmark)</td>
<td>3,400,000</td>
</tr>
<tr>
<td>Euroclear Sweden</td>
<td>3,165,453</td>
</tr>
</tbody>
</table>

Table 5b. CSDs with the lowest number of securities accounts

<table>
<thead>
<tr>
<th>CSD</th>
<th>Number of securities accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interbolsa (Portugal)</td>
<td>827</td>
</tr>
<tr>
<td>Euroclear Nederland</td>
<td>815</td>
</tr>
<tr>
<td>Euroclear Belgium</td>
<td>638</td>
</tr>
<tr>
<td>Iberclear (Spain)</td>
<td>381</td>
</tr>
<tr>
<td>LuxCSD (Luxembourg)</td>
<td>20</td>
</tr>
</tbody>
</table>
4.3 New issues and redemptions

Although in past years some CSDs experienced difficulties to report data on new issues and redemptions, 2013 data was provided by nearly all CSDs (40 out of 41), sometimes excluding equity instruments because of valuation issues (difficulty to rely on the nominal value of the securities).

In 2013, ECSDA members altogether accepted new securities issues worth around EUR 19 trillion. This translates into an average issuance value per CSD of EUR 395 billion, broadly the same as in 2012 (however based on a larger sample). Unsurprisingly, the differences across CSDs are considerable, ranging from new issues worth less than EUR 1 billion for six CSDs to around EUR 5 trillion for CBF and Euroclear France.

*Chart 6. Total new issues and redemptions in 2013 (EUR billion)*

<table>
<thead>
<tr>
<th></th>
<th>New issues</th>
<th>Redemptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSDs</td>
<td>14,575,889</td>
<td>4,472,894</td>
</tr>
<tr>
<td>ICSDs</td>
<td>13,944,541</td>
<td>4,782,535</td>
</tr>
</tbody>
</table>
5. Securities transactions

5.1 Securities held in CSDs

From 2012 to 2013, the total value of all securities held at ECSDA member CSDs increased by 6.5% to reach almost **EUR 48 trillion**. Although it is slightly more pronounced than in recent years, this increase adds to the generally positive trend since 2010 (see Chart 7). In total, nearly EUR 5 trillion worth of securities were added in accounts held at CSDs over the last two years. As in previous years, the increase was even steeper for ECSDA members outside the EU (+11.4%). These CSDs continue to gain ground relative to EU CSDs, having increased their share in the total value of securities on accounts from 7.6% in 2010 to 8.2% in 2013.

![Chart 7: Total value of securities held on CSD accounts (in EUR billion)](chart)

5.2 Delivery instructions

In 2013, European CSDs collectively processed **around 410 million delivery instructions**, 30 million more than in 2012. This translates into an average yearly settlement volume per CSD of over 10 million instructions or around 40,000 instructions per day of operation, up by 8% compared to 2012. This excludes however MKK, which is a particular case. Turkey is by far the largest European market operating based on a direct holding model, with more than 43 million securities accounts maintained at the CSD level. As a result, MKK alone processed more than 216 million delivery instructions in 2013.

In terms of value, the delivery instructions processed by ECSDA members in 2013 represented **over EUR 1.1 quadrillion** (see Chart 8), a plus of nearly 10% or EUR 100 trillion as compared to 2012. This translates into an average of EUR 27.2 trillion of deliveries per CSD, although this figure may be slightly misleading given the substantial differences across ECSDA members. Each of the six smallest CSDs in terms of settlement volumes settled instructions worth less than EUR

---

4 Based on the assumption of an average of 256 days of operation.
5 In addition to the high number of beneficial owner accounts, MKK also maintains many operational sub accounts for operations such as mutual funds transactions, collateral operations, legal transactions (i.e. attachments), operations related to securities lending and borrowing, corporate actions, etc. The number of delivery instructions processed by MKK is very large since it includes movements between those operational sub accounts, in addition to movements between participant and investor accounts, which itself is large due to the direct holding structure.
1 billion in 2013, whereas the largest ICSD in this respect, Euroclear Bank, settled instructions worth more than EUR 340 trillion, followed by Euroclear UK & Ireland with an annual settlement value also well above EUR 300 trillion\(^6\). In other words, in 2013, these two CSDs alone settled each on average instructions worth more than EUR 1,200 billion every day.

Finally, based on these figures, it is possible to calculate the average size of a single delivery instruction for all CSDs. In 2013, the average settlement instruction processed by ECSDA members was around EUR 2.7 million (excluding MKK), slightly more than in 2012, but below the two preceding years where the average settlement instruction had a value of around 2.9 million. The average value per delivery instruction for MKK was only around EUR 13,000, reflecting the specificities of the Turkish account holding structure (see footnote 5).

**Chart 8: Delivery instructions processed by ECSDA members**

\(^6\) The settlement figures for Euroclear UK & Ireland for the years 2010-2013 were substantially revised upward to include instructions linked to auto-collateralisation. Given the size of the UK market, this also had a significant impact on aggregate figures.
Section B: Individual factsheets

This section of the report contains a 1-page factsheet on each ECSDA member organisation. Unless otherwise specified, all information provided is valid as at 31 December 2013.
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1 (OTC transactions)
- Model 2
- Model 3 (On-exchange transactions)

Users

Securities accounts: 923
End investor accounts at CSD: No
Total participants: 152

- Domestic
- Non-domestic

74% 26%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Corporate information

For profit
61 employees (61 FTEs)

CSD ownership:

- CSD participants: 38%
- Other: 62%

Securities transactions 2013

<table>
<thead>
<tr>
<th>New issues (EUR million)</th>
<th>53,309</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redistributions (EUR million)</td>
<td>37,526</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>509,066</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>218,823</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>1,252</td>
</tr>
</tbody>
</table>

Value of deliveries (million €)
Number of deliveries (thousands)

2010: 221,020
2011: 236,580
2012: 221,220
2013: 218,823

2010: 1,460
2011: 1,376
2012: 1,136
2013: 1,252
Central Registry of Securities JSC
Banja Luka (CR HoV RS)
Centralni registar hartija od vrijednosti a.d. Banja Luka, Sime Šolaje 1, 78000 Banjaluka, Republic of Srpska
Bosnia and Herzegovina
www.crhovsrs.org

Basic information
- Banking license
- Designated SSS
- Eurosysterm eligible SSS
- T2S

BIS settlement model:
- Model 1 (Money market transactions)
- Model 2 (On-exchange transactions)
- Model 3

Corporate information
For profit
35 employees (35 FTEs)

CSD ownership:
- State authorities
- Trading venue
- CSD participants

Users
Securities accounts: 1,260,000
End investor accounts at CSD: Yes
Total participants: 14

Services
Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Securities transactions 2013

<table>
<thead>
<tr>
<th>Description</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries (million €)</td>
<td>75</td>
<td>80</td>
<td>130</td>
<td>40</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>20</td>
<td>26</td>
<td>31</td>
<td>88</td>
</tr>
</tbody>
</table>

Value of deliveries (million €)
Number of deliveries (thousands)
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S

BIS settlement model:
- Model 1 (T-bills)
- Model 2 (On-exchange transactions)
- Model 3

Corporate information

- Not for profit
- 27 employees (27 FTEs)

CSD ownership:
- State authorities: 25%
- CSD participants: 75%

Users

- Securities accounts: 351,062
- End investor accounts at CSD: Yes
- Total participants: 15

- Domestic
- Non-domestic

100%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Securities transactions 2013

- New issues (EUR million): 210
- Redemptions (EUR million): 207
- Value of securities held on accounts (EUR million): 6,223
- Value of deliveries (EUR million): 248
- Number of deliveries (thousands): 50

Value of deliveries (million €) - Number of deliveries (thousands)
### Services

Financial instruments accepted for deposit and/or settlement:

- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:

- NNA
- LEI

### Corporate information

For profit

15 employees (15 FTEs)

### CSD ownership:

100%

### Users

Securities accounts: 0

End investor accounts at CSD: No

Total participants: 3

<table>
<thead>
<tr>
<th>Domestic</th>
<th>Non-domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

### Securities transactions 2013

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>0</td>
</tr>
<tr>
<td>Redemptions (EUR million)</td>
<td>0</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>0</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>0</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>0</td>
</tr>
</tbody>
</table>
Services
Financial instruments accepted for deposit and/or settlement:

- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Depositary Receipts

Other services:
- NNA
- LEI

Corporation information
For profit
2,725 employees (2,512 EFTs)

CSD ownership:
100%

Users
Securities accounts: 21,518
End investor accounts at CSD: No
Total participants: 1,474

Basic information
- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S

BIS settlement model:
- Model 1
- Model 2
- Model 3

Securities transactions 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>3,041,423</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redemptions (EUR million)</td>
<td>3,865,455</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>10,614,296</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>342,231,890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>70,095</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Value of deliveries (billion €) and Number of deliveries (thousands)

- Domestic 2%
- Non-domestic 98%
Euroclear Belgium
Euroclear Belgium, 1 Boulevard du Roi Albert II, 1210 Brussels, Belgium
www.euroclear.com

Basic information
- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information
For profit
52 employees (50 FTEs)

CSD ownership:
- CSD participants

Users
Securities accounts: 638
End investor accounts at CSD: No
Total participants: 76
- Domestic
- Non-domestic

Services
Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Other: VVPR strips

Other services:
- NNA
- LEI

Securities transactions 2013
- New issues (EUR million) 13,602
- Redemptions (EUR million) 3,220
- Value of securities held on accounts (EUR million) 202,745
- Value of deliveries (EUR million) 783,324
- Number of deliveries (thousands) 1,908

Value of deliveries (million €) vs. Number of deliveries (thousands)
- 2010: 463,630
- 2011: 555,970
- 2012: 552,900
- 2013: 783,324

CSD ownership:
Basic information
- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information
For profit
26 employees (25 FTEs)

CSD ownership:
- State authorities
- Trading venue
- CSD participants
- Other

Users
- Securities accounts: 3,089,532
- End investor accounts at CSD: Yes
- Total participants: 102

- Domestic
- Non-domestic

99% 1%

Services
Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Compensatory Instruments

Other services:
- NNA
- LEI

Securities transactions 2013
- New issues (EUR million): 339
- Redemptions (EUR million): 635
- Value of securities held on accounts (EUR million): 32,462
- Value of deliveries (EUR million): 626
- Number of deliveries (thousands): 503

Value of deliveries (million €) Number of deliveries (thousands)

2010 2011 2012 2013
190 510 810 626
355 367 289 503

Central Depository AD (CDAD)
Central Depository AD, 6 Tri Ushi Str., 1000 Sofia, Bulgaria
www.csd-bg.bg
### Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

### Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

### Corporate information

For profit

272 employees (256 FTEs)

**CSD ownership:**

- CSD participants: 4%
- Other: 96%

### Users

- Securities accounts: 22,568
- End investor accounts at CSD: No
- Total participants: 367

<table>
<thead>
<tr>
<th>Domestic</th>
<th>Non-domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>53%</td>
<td>47%</td>
</tr>
</tbody>
</table>

### Securities transactions 2013

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (EUR million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues</td>
<td>170,518</td>
</tr>
<tr>
<td>Redemptions</td>
<td>49,914</td>
</tr>
<tr>
<td>Value of securities held on accounts</td>
<td>2,349,325</td>
</tr>
<tr>
<td>Value of deliveries</td>
<td>5,551,881</td>
</tr>
<tr>
<td>Number of deliveries</td>
<td>49,817</td>
</tr>
</tbody>
</table>

![Graph showing values for 2010, 2011, 2012, 2013](image)
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S

BIS settlement model:
- Model 1 (OTC transactions)
- Model 2 (On-exchange transactions)
- Model 3

Corporate information

- Not for profit
- 22 employees (22 FTEs)

CSD ownership:

- State authorities
  
100%

Users

- Securities accounts: 246,645
- End investor accounts at CSD: Yes
- Total participants: 35

<table>
<thead>
<tr>
<th>Domestic</th>
<th>Non-domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>49%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Securities transactions 2013

- New issues (EUR million): 9,957
- Redemptions (EUR million): 12,561
- Value of securities held on accounts (EUR million): 7,395
- Value of deliveries (EUR million): 2,042
- Number of deliveries (thousands): 40

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: GDRs

Other services:
- NNA
- LEI
Central Securities Depository Prague (CSD Prague)

Centrální depozitář cenných papírů, a.s., Rybná 14, 110 05, Prague, Czech Republic
www.centralnidepozitar.cz

Basic information
- Banking license
- Designated SSS
- Eurosysterm eligible SSS
- T2S

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information
For profit
40 employees (39 FTEs)

CSD ownership:
100%

Users
Securities accounts: 1,639,948
End investor accounts at CSD: Yes
Total participants: 27

Total: 27
Domestic: 22
Non-domestic: 5

Services
Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Securities transactions 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>107,870</td>
<td>145,260</td>
<td>157,000</td>
<td>136,694</td>
</tr>
<tr>
<td>Redemptions (EUR million)</td>
<td>602</td>
<td>837</td>
<td>701</td>
<td>737</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>111,259</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>107,870</td>
<td>145,260</td>
<td>157,000</td>
<td>136,694</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>602</td>
<td>837</td>
<td>701</td>
<td>737</td>
</tr>
</tbody>
</table>
Clearstream Banking Frankfurt (CBF)

Clearstream Banking AG, Mergenthalerallee 61, 65760 Eschborn, Germany
www.clearstream.com

Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information

For profit
318 employees (290 FTEs)

CSD ownership:

100% Trading venue

Users

Securities accounts: 10,515
End investor accounts at CSD: No

Total participants: 359

- Domestic 51%
- Non-domestic 49%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Securities transactions 2013

New issues (EUR million) 4,455,459
Redemptions (EUR million) 4,160,427
Value of securities held on accounts (EUR million) 6,376,067
Value of deliveries (EUR million) 59,684,747
Number of deliveries (thousands) 61,225

Value of deliveries (billion €)
Number of deliveries (thousands)
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR from 2016 & DKK from 2018)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information

For profit
186 employees (180 FTEs)

CSD ownership:
- Central bank
- CSD participants
- Private investors

Users

Securities accounts: 3,400,000
End investor accounts at CSD: Yes

Total participants: 177

- Domestic
- Non-domestic

63% 37%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Non-tradeable certificates issued by special-purpose UCITS

Other services:
- NNA
- LEI

Securities transactions 2013

<table>
<thead>
<tr>
<th>New issues (EUR million)</th>
<th>248,209</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redemptions (EUR million)</td>
<td>266,785</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>907,575</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>6,257,296</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>13,065</td>
</tr>
</tbody>
</table>

Value of deliveries (million €) vs Number of deliveries (thousands)
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information

For profit
23 employees (23 FTEs)

CSD ownership:

- Trading venue

100%

Users

Securities accounts: 107,377
End investor accounts at CSD: Yes

Total participants: 12

- Domestic
- Non-domestic

75%
25%

Services

Financial instruments accepted for deposit and/or settlement:

- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other:

Other services:

- NNA
- LEI

Securities transactions 2013

New issues (EUR million) | 305
Redemptions (EUR million) | 233
Value of securities held on accounts (EUR million) | 10,331
Value of deliveries (EUR million) | 3,082
Number of deliveries (thousands) | 87
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1 (CADE Platform)
- Model 2 (SCLV Platform)
- Model 3

Users

Securities accounts: 381
End investor accounts at CSD: No
Total participants: 150

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Corporate information

For profit
109 employees (109 FTEs)

CSD ownership:

100%

Securities transactions 2013

- New issues (EUR million): 533,238
- Redemptions (EUR million): 516,588
- Value of securities held on accounts (EUR million): 2,197,626
- Value of deliveries (EUR million): 66,579,693
- Number of deliveries (thousands): 28,297

Value of deliveries (billion €)

Number of deliveries (thousands)

- 2010: 88,259
- 2011: 88,199
- 2012: 25,900
- 2013: 66,580
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information

For profit
77 employees (74 FTEs)

CSD ownership:

100%

Users

Securities accounts: 1,351,852
End investor accounts at CSD: Yes

Total participants: 26

Domestic  Non-domestic
58%  42%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Finnish Depositary Receipts (FDR)

Other services:
- NNA
- LEI

Securities transactions 2013

New issues (EUR million) 43,115
Redemptions (EUR million) 38,357
Value of securities held on accounts (EUR million) 274,118
Value of deliveries (EUR million) 487,223
Number of deliveries (thousands) 6,188
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Users

Securities accounts: 1,157
End investor accounts at CSD: No
Total participants: 157

- Domestic
- Non-domestic

75% 25%

Services

Financial instruments accepted for deposit and/or settlement:

- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other:

Other services:

- NNA
- LEI

Corporate information

For profit
313 employees (299 FTEs)

CSD ownership:

100%

Users

Securities accounts: 1,157
End investor accounts at CSD: No
Total participants: 157

- Domestic
- Non-domestic

75% 25%

Securities transactions 2013

New issues (EUR million) 5,046,742
Redemptions (EUR million) 5,092,646
Value of securities held on accounts (EUR million) 5,630,117
Value of deliveries (EUR million) 131,224
Number of deliveries (thousands) 24,382

Value of deliveries (billion €)

0 5,000 10,000 15,000 20,000 25,000 30,000 35,000

2010 2011 2012 2013

24,382 23,620 22,896 21,224

2010 2011 2012 2013

131,224 122,896 116,537 106,974

21,224 22,896 23,620 24,382

2010 2011 2012 2013
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S

BIS settlement model:
- Model 1 (beneficiary account level)
- Model 2 (net on cash at participant cash account level)
- Model 3

Users

- Securities accounts: 1,820,526
- End investor accounts at CSD: Yes
- Total participants: 70

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Hellenic Depository Receipts, Structured Products

Other services:
- NNA
- LEI

Corporate information

For profit
- 107 employees (107 FTEs)

CSD ownership:

100% - Trading venue

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries</td>
<td>45,010</td>
<td>32,440</td>
<td>21,010</td>
<td>50,183</td>
</tr>
<tr>
<td>(million €)</td>
<td>8,054</td>
<td>6,699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries</td>
<td></td>
<td></td>
<td></td>
<td>7,346</td>
</tr>
<tr>
<td>(thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New issues (EUR million) | 6,748
Redemptions (EUR million) | 0
Value of securities held on accounts (EUR million) | 68,050
Value of deliveries (EUR million) | 50,183
Number of deliveries (thousands) | 7,346

Users

- Securities accounts: 1,820,526
- End investor accounts at CSD: Yes
- Total participants: 70

Domestic | Non-domestic
73% | 27%

Corporate information

For profit
- 107 employees (107 FTEs)

CSD ownership:

100% - Trading venue

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries</td>
<td>45,010</td>
<td>32,440</td>
<td>21,010</td>
<td>50,183</td>
</tr>
<tr>
<td>(million €)</td>
<td>8,054</td>
<td>6,699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries</td>
<td></td>
<td></td>
<td></td>
<td>7,346</td>
</tr>
<tr>
<td>(thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New issues (EUR million) | 6,748
Redemptions (EUR million) | 0
Value of securities held on accounts (EUR million) | 68,050
Value of deliveries (EUR million) | 50,183
Number of deliveries (thousands) | 7,346

Users

- Securities accounts: 1,820,526
- End investor accounts at CSD: Yes
- Total participants: 70

Domestic | Non-domestic
73% | 27%

Corporate information

For profit
- 107 employees (107 FTEs)

CSD ownership:

100% - Trading venue

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries</td>
<td>45,010</td>
<td>32,440</td>
<td>21,010</td>
<td>50,183</td>
</tr>
<tr>
<td>(million €)</td>
<td>8,054</td>
<td>6,699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries</td>
<td></td>
<td></td>
<td></td>
<td>7,346</td>
</tr>
<tr>
<td>(thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New issues (EUR million) | 6,748
Redemptions (EUR million) | 0
Value of securities held on accounts (EUR million) | 68,050
Value of deliveries (EUR million) | 50,183
Number of deliveries (thousands) | 7,346

Users

- Securities accounts: 1,820,526
- End investor accounts at CSD: Yes
- Total participants: 70

Domestic | Non-domestic
73% | 27%

Corporate information

For profit
- 107 employees (107 FTEs)

CSD ownership:

100% - Trading venue

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries</td>
<td>45,010</td>
<td>32,440</td>
<td>21,010</td>
<td>50,183</td>
</tr>
<tr>
<td>(million €)</td>
<td>8,054</td>
<td>6,699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries</td>
<td></td>
<td></td>
<td></td>
<td>7,346</td>
</tr>
<tr>
<td>(thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New issues (EUR million) | 6,748
Redemptions (EUR million) | 0
Value of securities held on accounts (EUR million) | 68,050
Value of deliveries (EUR million) | 50,183
Number of deliveries (thousands) | 7,346

Users

- Securities accounts: 1,820,526
- End investor accounts at CSD: Yes
- Total participants: 70

Domestic | Non-domestic
73% | 27%

Corporate information

For profit
- 107 employees (107 FTEs)

CSD ownership:

100% - Trading venue

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries</td>
<td>45,010</td>
<td>32,440</td>
<td>21,010</td>
<td>50,183</td>
</tr>
<tr>
<td>(million €)</td>
<td>8,054</td>
<td>6,699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries</td>
<td></td>
<td></td>
<td></td>
<td>7,346</td>
</tr>
<tr>
<td>(thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New issues (EUR million) | 6,748
Redemptions (EUR million) | 0
Value of securities held on accounts (EUR million) | 68,050
Value of deliveries (EUR million) | 50,183
Number of deliveries (thousands) | 7,346

Users

- Securities accounts: 1,820,526
- End investor accounts at CSD: Yes
- Total participants: 70

Domestic | Non-domestic
73% | 27%

Corporate information

For profit
- 107 employees (107 FTEs)

CSD ownership:

100% - Trading venue

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries</td>
<td>45,010</td>
<td>32,440</td>
<td>21,010</td>
<td>50,183</td>
</tr>
<tr>
<td>(million €)</td>
<td>8,054</td>
<td>6,699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries</td>
<td></td>
<td></td>
<td></td>
<td>7,346</td>
</tr>
<tr>
<td>(thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New issues (EUR million) | 6,748
Redemptions (EUR million) | 0
Value of securities held on accounts (EUR million) | 68,050
Value of deliveries (EUR million) | 50,183
Number of deliveries (thousands) | 7,346

Users

- Securities accounts: 1,820,526
- End investor accounts at CSD: Yes
- Total participants: 70

Domestic | Non-domestic
73% | 27%

Corporate information

For profit
- 107 employees (107 FTEs)

CSD ownership:

100% - Trading venue

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries</td>
<td>45,010</td>
<td>32,440</td>
<td>21,010</td>
<td>50,183</td>
</tr>
<tr>
<td>(million €)</td>
<td>8,054</td>
<td>6,699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries</td>
<td></td>
<td></td>
<td></td>
<td>7,346</td>
</tr>
<tr>
<td>(thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New issues (EUR million) | 6,748
Redemptions (EUR million) | 0
Value of securities held on accounts (EUR million) | 68,050
Value of deliveries (EUR million) | 50,183
Number of deliveries (thousands) | 7,346

Users

- Securities accounts: 1,820,526
- End investor accounts at CSD: Yes
- Total participants: 70

Domestic | Non-domestic
73% | 27%
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S
- BIS settlement model:
  - Model 1 ("trade-for-trade" service)
  - Model 2
  - Model 3 (contractual service)

Users

- Securities accounts: 889,943
- End investor accounts at CSD: Yes
- Total participants: 65

Services

- Financial instruments accepted for deposit and/or settlement:
  - Equities
  - ETFs
  - Government bonds
  - Corporate bonds
  - Treasury bills
  - Commercial paper
  - Commercial paper
  - Investment funds
  - Warrants and rights
  - Emission rights
  - Other: Croatian government rights, Certificates

- Other services:
  - NNA
  - LEI

Corporate information

For profit

- 43 employees (43 FTEs)

CSD ownership:

- State authorities
- CSD participants
- Other

Value of deliveries (million €)

Securities transactions 2013

- New issues (EUR million) 6,072
- Redemptions (EUR million) 5,495
- Value of securities held on accounts (EUR million) 42,904
- Value of deliveries (EUR million) 29,687
- Number of deliveries (thousands) 607
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1 (OTC transactions)
- Model 2
- Model 3 (On-exchange transactions)

Corporate information

For profit
133 employees (130 FTEs)

CSD ownership:
- Central bank: 47%
- Trading venue: 53%

Users

Securities accounts: 4,530
End investor accounts at CSD: No
Total participants: 169

- Domestic: 90%
- Non-domestic: 10%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Futures, Options, Mortgage Bonds, Capital Bill

Other services:
- NNA
- LEI

Securities transactions 2013

New issues (EUR million) 449,392
Redemptions (EUR million) 436,404
Value of securities held on accounts (EUR million) 132,765
Value of deliveries (EUR million) 1,689,323
Number of deliveries (thousands) 541

Value of deliveries (million €) and Number of deliveries (thousands)
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S
- BIS settlement model:
  - Model 1
  - Model 2
  - Model 3

Users

- Securities accounts: 78,000
- End investor accounts at CSD: Yes
- Total participants: 27
  - Domestic 74%
  - Non-domestic 26%

Services

- Financial instruments accepted for deposit and/or settlement:
  - Equities
  - ETFs
  - Government bonds
  - Corporate bonds
  - Treasury bills
  - Commercial paper
  - Investment funds
  - Warrants and rights
  - Emission rights
  - Other: -
- Other services:
  - NNA
  - LEI

Corporate information

- For profit
- 6 employees (6 FTEs)

CSD ownership:

- Trading venue 100%

Securities transactions 2013

- New issues (EUR million): 1,487
- Redemptions (EUR million): 1,725
- Value of securities held on accounts (EUR million): 21,726
- Value of deliveries (EUR million): 0
- Number of deliveries (thousands): 0
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1 (Most of the daytime cycle)
- Model 2
- Model 3 (Overnight batch)

Users

- Securities accounts: 976
- End investor accounts at CSD: No
- Total participants: 233

- Domestic
- Non-domestic
  - 95%
  - 5%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Cooperative shares (issued by Italian cooperative banks)

Other services:
- NNA
- LEI

Corporate information

For profit
- 100 employees (100 FTEs)

CSD ownership:

- Trading venue
- Other

99%
1%

Securities transactions 2013

- New issues (EUR million): 650,294
- Redemptions (EUR million): 690,092
- Value of securities held on accounts (EUR million): 3,298,995
- Value of deliveries (EUR million): 62,349,196
- Number of deliveries (thousands): 20,997

Value of deliveries (billion €)

Number of deliveries (thousands)

- 2010: 77,357
- 2011: 72,160
- 2012: 58,456
- 2013: 62,349

- 2010: 25,906
- 2011: 23,490
- 2012: 21,292
- 2013: 20,997

Monte Titoli

Monte Titoli S.p.A, Piazza degli Affari, 6, 20123 Milan, Italy
www.montetitoli.it
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Users

- Securities accounts: 3,280
- End investor accounts at CSD: Yes
- Total participants: 22

<table>
<thead>
<tr>
<th>Domestic</th>
<th>Non-domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>86%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Services

- Financial instruments accepted for deposit and/or settlement:
  - Equities
  - ETFs
  - Government bonds
  - Corporate bonds
  - Treasury bills
  - Commercial paper
  - Investment funds
  - Warrants and rights
  - Emission rights
  - Other:

- Other services:
  - NNA
  - LEI

Corporate information

For profit

- 18 employees (18 FTEs)

CSD ownership:

- Trading venue

86%

100%

Securities transactions 2013

<table>
<thead>
<tr>
<th>New issues (EUR million)</th>
<th>1,805</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redemptions (EUR million)</td>
<td>1,485</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>10,847</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>3,198</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>99</td>
</tr>
</tbody>
</table>

Value of deliveries (million €)  
Number of deliveries (thousands)
Clearstream Banking Luxembourg (CBL)

Clearstream International SA, 42 Avenue JF Kennedy, 1855 Luxembourg
www.clearstream.com

Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information

For profit
1,215 employees (1,166 FTEs)

CSD ownership:

100%

Users

Securities accounts:
- End investor accounts at CSD: No

Total participants: 1,300

- Domestic
- Non-domestic

8% 92%

Services

Financial instruments accepted for deposit and/or settlement:

- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Eurobonds, foreign bonds, depositary receipts, asset-backed securities and other collateralised debt securities

Other services:
- NNA
- LEI

Securities transactions 2013

<table>
<thead>
<tr>
<th>Description</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>62,815</td>
<td>74,282</td>
<td>71,850</td>
<td>77,295</td>
</tr>
<tr>
<td>Redemptions (EUR million)</td>
<td>19,809</td>
<td>21,129</td>
<td>21,586</td>
<td>22,102</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information

For profit
3 employees (3 FTEs)

CSD ownership:
- 50% Central bank
- 50% Trading venue

Users

Securities accounts: 20
End investor accounts at CSD: No
Total participants: 12

- Domestic: 67%
- Non-domestic: 33%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other -

Other services:
- NNA
- LEI

Securities transactions 2013

- New issues (EUR million): 5,962
- Redemptions (EUR million): 0
- Value of securities held on accounts (EUR million): 5,996
- Value of deliveries (EUR million): 13,100
- Number of deliveries (thousands): 2
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1 (OTC transactions, same day settlements)
- Model 2
- Model 3

Corporate information

For profit
19 employees (17 FTEs)

CSD ownership:

100%

Users

Securities accounts: 881
End investor accounts at CSD: No
Total participants: 21

81% Domestic 19% Non-domestic

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Securities transactions 2013

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>718</td>
</tr>
<tr>
<td>Redemptions (EUR million)</td>
<td>813</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>3,225</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>2,741</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>42</td>
</tr>
</tbody>
</table>
Central Depository Agency (CDA) of Montenegro

Centralna Depozitarna Agencija A.D. Podgorica, Novaka Miloseva bb, 81000 Podgorica, Montenegro
www.cda.me

Basic information
- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information
For profit
18 employees (18 FTEs)

CSD ownership:
- Central bank
- CSD participants
- Private investors

Users
Securities accounts: 474,275
End investor accounts at CSD: Yes
Total participants: 20

- Domestic
- Non-domestic

Services
Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Securities transactions 2013

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>52</td>
</tr>
<tr>
<td>Redemptions (EUR million)</td>
<td>1</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>5,203</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>805</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>8</td>
</tr>
</tbody>
</table>

Value of deliveries (million €)
Number of deliveries (thousands)
Services

Financial instruments accepted for deposit and/or settlement:

- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:

- NNA
- LEI

Corporate information

For profit
22 employees (22 FTEs)

CSD ownership:

- 45% CSD participants
- 55% Private investors

Users

Securities accounts: 264,176
End investor accounts at CSD: Yes

Total participants: 13

- Domestic
- Non-domestic

100%

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>1,740</td>
</tr>
<tr>
<td>Redemptions (EUR million)</td>
<td>1,570</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>5,074</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>176</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>18</td>
</tr>
</tbody>
</table>

Value of deliveries (million €) vs Number of deliveries (thousands)
Malta Stock Exchange (MSE)
Malta Stock Exchange PLC, Garrison Chapel, Castile Place, Valletta VLT 1063, Malta
www.borzamalta.com.mt

Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1 (Treasury Bills, Money Market instruments)
- Model 2
- Model 3

Corporate information

For profit
14 employees (14 FTEs)

CSD ownership:
- State authorities 100%

Users

Securities accounts: 244,785
End investor accounts at CSD: Yes
Total participants: 14

- Domestic 93%
- Non-domestic 7%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Securities transactions 2013

- New issues (EUR million): 1,969
- Redemptions (EUR million): 1,497
- Value of securities held on accounts (EUR million): 9,447
- Value of deliveries (EUR million): 1,600
- Number of deliveries (thousands): 14

Graphs showing value of deliveries (million €) and number of deliveries (thousands) from 2010 to 2013.
Euroclear Nederland

Euroclear Nederland, Herengracht 459-469, 1017 BS Amsterdam, the Netherlands
www.euroclear.com

Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2
- Model 3

Users

Securities accounts: 815
End investor accounts at CSD: No

Total participants: 69

- Domestic
- Non-domestic

23% 77%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: -

Other services:
- NNA
- LEI

Corporate information

For profit
44 employees (40 FTEs)

CSD ownership:

100%

Securities transactions 2013

New issues (EUR million) 628,531
Redemptions (EUR million) 741,662
Value of securities held on accounts (EUR million) 959,303
Value of deliveries (EUR million) 4,401,799
Number of deliveries (thousands) 5,348

Value of deliveries (million €) Number of deliveries (thousands)
Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other:

Other services:
- NNA
- LEI

Corporate information

For profit
112 employees (112 FTEs)

CSD ownership:
- CSD participants: 28%
- Private investors: 72%

Users

Securities accounts: 1,357,188
End investor accounts at CSD: Yes

Total participants: 68

Domestic: 44%
Non-domestic: 56%

Securities transactions 2013

New issues (EUR million) -
Redemptions (EUR million) -
Value of securities held on accounts (EUR million) 587,937
Value of deliveries (EUR million) 2,193,830
Number of deliveries (thousands) 6,584

Value of deliveries (million €)
Number of deliveries (thousands)
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1
- Model 2 (batch cycle)
- Model 3

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Other: Investment certificates, allotment certificates, IFIs bonds, central bank bonds, municipal bonds, mortgage bonds

Other services:
- NNA
- LEI

Corporate information

Not for profit
186 employees (183 FTEs)

CSD ownership:
- State authorities 33.3%
- Central bank 33.3%
- Trading venue 33.3%

Users

Securities accounts: 37,040
End investor accounts at CSD: Yes
Total participants: 68

Securities transactions 2013

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>50,722</td>
</tr>
<tr>
<td>Redemptions (EUR million)</td>
<td>33,855</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>303,495</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>10,782,960</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>14,869</td>
</tr>
</tbody>
</table>

Value of deliveries (billion €) vs. Number of deliveries (thousands)
Basic information

☐ Banking license
✓ Designated SSS
✓ Eurosystem eligible SSS
✓ T2S (EUR)

BIS settlement model:
✓ Model 1 (OTC transactions, realignments and others)
✓ Model 2 (On-exchange transactions)
☐ Model 3

Corporate information

For profit
37 employees (37 FTEs)

CSD ownership:

100%

Users

Securities accounts: 827
End investor accounts at CSD: No
Total participants: 37

Domestic □ Non-domestic

89% 11%

Services

Financial instruments accepted for deposit and/or settlement:
✓ Equities
✓ ETFs
✓ Government bonds
✓ Corporate bonds
✓ Treasury bills
✓ Commercial paper
✓ Investment funds
✓ Warrants and rights
☐ Emission rights
☐ Other: -

Other services:
✓ NNA
☐ LEI

Securities transactions 2013

New issues (EUR million) 51,886
Redemptions (EUR million) 68,260
Value of securities held on accounts (EUR million) 592,820
Value of deliveries (EUR million) 169,837
Number of deliveries (thousands) 973

Value of deliveries (million €) Number of deliveries (thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Value of Deliveries</th>
<th>Number of Deliveries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>150,800</td>
<td>960</td>
</tr>
<tr>
<td>2011</td>
<td>124,960</td>
<td>942</td>
</tr>
<tr>
<td>2012</td>
<td>115,700</td>
<td>838</td>
</tr>
<tr>
<td>2013</td>
<td>169,837</td>
<td>973</td>
</tr>
</tbody>
</table>
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)

BIS settlement model:
- Model 1 (OTC transactions)
- Model 2 (On-exchange transactions)
- Model 3

Users

- Securities accounts: 9,090,127
- End investor accounts at CSD: Yes
- Total participants: 57

Users

- Domestic
- Non-domestic

91% 9%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Structured products, Municipal bonds

Other services:
- NNA
- LEI

Corporate information

For profit
- 56 employees (56 FTEs)

CSD ownership:
- Trading venue
- CSD participants
- Private investors

69%
25%
6%

Securities transactions 2013

- New issues (EUR million): 4,055
- Redemptions (EUR million): 169
- Value of securities held on accounts (EUR million): 21,726
- Value of deliveries (EUR million): 4,538
- Number of deliveries (thousands): 963

Value of deliveries (million €) Number of deliveries (thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries (million €)</td>
<td>3,590</td>
<td>3,010</td>
<td>2,900</td>
<td>4,538</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>1,195</td>
<td>1,177</td>
<td>1,011</td>
<td>963</td>
</tr>
</tbody>
</table>
Basic information
- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S

BIS settlement model:
- Model 1
- Model 2
- Model 3

Corporate information
- Not for profit
- 35 employees (35 FTEs)

CSD ownership:
- 100% State authorities

Users
- Securities accounts: 8,388,970
- End investor accounts at CSD: Yes

Total participants: 62

Services
- Financial instruments accepted for deposit and/or settlement:
  - Equities
  - ETFs
  - Government bonds
  - Corporate bonds
  - Treasury bills
  - Commercial paper
  - Investment funds
  - Warrants and rights
  - Emission rights
  - Other: Municipal bonds

Other services:
- NNA
- LEI

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries (million €)</td>
<td>77,400</td>
<td>64,870</td>
<td>49,040</td>
<td>94,563</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>5,838</td>
<td>5,589</td>
<td>578</td>
<td>0</td>
</tr>
</tbody>
</table>
Basic information

- Banking license
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Eurobonds, Depositary receipts
- Other:
  - NNA
  - LEI

Corporate information

For profit
516 employees (495 FTEs)

CSD ownership:
100% Trading venue

Users

- Securities accounts: 3,699
- End investor accounts at CSD: No
- Total participants: 908

Securities transactions 2013

- New issues (EUR million): 62,380
- Redemptions (EUR million): 22,445
- Value of securities held on accounts (EUR million): 514,068
- Value of deliveries (EUR million): 3,971,309
- Number of deliveries (thousands): 2,606
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S

BIS settlement model:
- Model 1
- Model 2
- Model 3

Users

Securities accounts: 3,165,453
End investor accounts at CSD: Yes
Total participants: 53

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Other: Lottery bonds, Swedish Depositary Receipts (SDB)

Other services:
- NNA
- LEI

Corporate information

For profit
69 employees (67 FTEs)

CSD ownership:
- 100%

Securities transactions 2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>9,077</td>
<td>12,238</td>
<td>10,522</td>
<td>12,572</td>
</tr>
<tr>
<td>Redeemptions (EUR million)</td>
<td>1,096,797</td>
<td>1,007,802</td>
<td>1,285,401</td>
<td></td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>10,743,360</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>10,751</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>12,572</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Value of deliveries (billion €)

Number of deliveries (thousands)
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S (EUR)
- BIS settlement model:
  - Model 1 (OTC DvP transactions)
  - Model 2 (On-exchange transactions)
- Model 3

Corporate information

For profit
63 employees (63 FTEs)

CSD ownership:

- State authorities
- CSD participants
- Private investors
- Other

Users

Securities accounts: 467,308
End investor accounts at CSD: Yes
Total participants: 30

Services

Financial instruments accepted for deposit and/or settlement:

- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Other:
- Other services:
  - NNA
  - LEI

Securities transactions 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of deliveries (million €)</td>
<td>24,400</td>
<td>25,570</td>
<td>22,690</td>
<td>18,060</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>120</td>
<td>166</td>
<td>267</td>
<td>98</td>
</tr>
</tbody>
</table>
Central Securities Depository of the Slovak Republic (CDCP SR)

Centrálny depozitár cenných papierov SR, a.s., ul. 29. augusta 1/A, 81480 Bratislava, Slovak Republic
www.cdcp.sk

Basic information

☐ Banking license
✓ Designated SSS
✓ Eurosystem eligible SSS
✓ T2S (EUR)

BIS settlement model:
✓ Model 1
✓ Model 2
☐ Model 3

Corporate information

For profit
72 employees (71 FTEs)

CSD ownership:

100%

Users

Securities accounts: 499,389
End investor accounts at CSD: Yes

Total participants: 20

Domestic Non-domestic

86% 14%

Services

Financial instruments accepted for deposit and/or settlement:
✓ Equities
✓ ETFs
✓ Government bonds
✓ Corporate bonds
✓ Treasury bills
✓ Commercial paper
✓ Investment funds
☐ Warrants and rights
☐ Emission rights
✓ Other: Co-operative units

Other services:
✓ NNA
☐ LEI

Securities transactions 2013

<table>
<thead>
<tr>
<th>New issues (EUR million)</th>
<th>9,946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redemptions (EUR million)</td>
<td>9,583</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>40,315</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>37,709</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>147</td>
</tr>
</tbody>
</table>

Value of deliveries (million €)

Number of deliveries (thousands)
Central Securities Depository of Turkey (MKK)

Merkezi Kayit Kurulusu A.S., Askerocagi Cad. Süzer Plaza No 6 Kat: 3, 34367 Elmadag-Sisli, Istanbul, Turkey
www.mkk.com.tr

Basic information

☐ Banking license
☐ Designated SSS
☐ Eurosystem eligible SSS
☐ T2S

BIS settlement model:
☒ Model 1 (Transactions between direct and indirect participants)
☐ Model 2
☒ Model 3 (Exchange transactions between direct participants)

Users

Securities accounts: 43,010,710
End investor accounts at CSD: Yes
Total participants: 141

Domestic   Non-domestic

Services

Financial instruments accepted for deposit and/or settlement:
☒ Equities
☒ ETFs
☒ Government bonds
☒ Corporate bonds
☒ Treasury bills
☒ Commercial paper
☒ Investment funds
☒ Warrants and rights
☐ Emission rights
☒ Other: ABS, Covered Bonds, Certificates, Sukus

Other services:
☐ NNA
☐ LEI

Corporate information

For profit
198 employees (198 FTEs)

CSD ownership:

☒ Trading venue
☒ CCP
☒ CSD participants

Securities transactions 2013

New issues (EUR million) 63,782
Redemptions (EUR million) 48,659
Value of securities held on accounts (EUR million) 301,803
Value of deliveries (EUR million) 2,849,747
Number of deliveries (thousands) 216,451

Value of deliveries (million €) Number of deliveries (thousands)

2010 2011 2012 2013
271,479 283,189 2,411,040 2,849,747
1,911,040 1,832,500 235,969 216,451

0 50,000 100,000 150,000 200,000 250,000 300,000
0 50,000 100,000 150,000 200,000 250,000 300,000
2010 2011 2012 2013
National Depository of Ukraine (NDU)
Public Joint-Stock Company "National Depository of Ukraine", 3. B. Grinchenka Str. 01001 Kyiv, Ukraine
www.csd.ua

Basic information
- Banking license
- Designated SSS
- Eurosistem eligible SSS
- T2S

BIS settlement model:
- Model 1 (OTC DvP transactions)
- Model 2
- Model 3 (On-exchange DvP transactions)

Users
Securities accounts: 10,980
End investor accounts at CSD: No
Total participants: 362

Domestic ■ Non-domestic
99% ■ 1%

Services
Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Emission rights
- Other: Investment certificates, government eurobonds, option certificates

Other services:
- NNA
- LEI

Corporate information
For profit
165 employees (154 FTEs)

CSD ownership:
- State authorities
- Central bank
- CSD participants
- Private investors
- Other

Securities transactions 2013
New issues (EUR million) 66,291
Redemptions (EUR million) 6,473
Value of securities held on accounts (EUR million) 84,307
Value of deliveries (EUR million) 783,064
Number of deliveries (thousands) 310

Value of deliveries (million €) ■ Number of deliveries (thousands)
2010: 14,290 ■ 103
2011: 33,600 ■ 138
2012: 21,590 ■ 57
2013: 783,064 ■ 310

www.csd.ua
Basic information

- Banking license
- Designated SSS
- Eurosystem eligible SSS
- T2S

BIS settlement model:
- Model 1 (EUR and GBP)
- Model 2 (USD)
- Model 3

Corporate information

For profit
307 employees (302 FTEs)

CSD ownership:
- 100% CSD participants

Users

Securities accounts: 403,000
End investor accounts at CSD: Yes
Total participants: 242

- Domestic
- Non-domestic

91% 9%

Services

Financial instruments accepted for deposit and/or settlement:
- Equities
- ETFs
- Government bonds
- Corporate bonds
- Treasury bills
- Commercial paper
- Investment funds
- Warrants and rights
- Other:

Other services:
- NNA
- LEI

Securities transactions 2013

<table>
<thead>
<tr>
<th>Description</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>New issues (EUR million)</td>
<td>817,353</td>
</tr>
<tr>
<td>Redemptions (EUR million)</td>
<td>675,075</td>
</tr>
<tr>
<td>Value of securities held on accounts (EUR million)</td>
<td>5,022,194</td>
</tr>
<tr>
<td>Value of deliveries (EUR million)</td>
<td>324,692,318</td>
</tr>
<tr>
<td>Number of deliveries (thousands)</td>
<td>56,851</td>
</tr>
</tbody>
</table>

Value of deliveries (billion €)

- 2010: 413,808
- 2011: 385,509
- 2012: 273,461
- 2013: 324,692

Number of deliveries (thousands)

- 2010: 52,084
- 2011: 51,785
- 2012: 47,868
- 2013: 56,851
Annex: Methodology

The data presented in this report has been collected in the first half of 2014 based on information provided by ECSDA members as of 31 December 2013.

Remarks:
- The column number refers to the columns of the online database at http://www.ecsda.eu/database.html.
- The data items marked with a (*) follow the same methodology as the ECB statistics on securities settlement systems.

1. Basic information and legal framework

<table>
<thead>
<tr>
<th>Column title</th>
<th>Description</th>
<th>Responses</th>
</tr>
</thead>
</table>
| 1 Country    | 2-letter ISO country code of the country in which the head office of the CSD is established | AT: Austria  
               BA: Bosnia Herzegovina  
               BE: Belgium  
               Etc.                                                                 |
| 2 Group      | Regional institutional grouping to which the country of incorporation of the CSD belongs | EA: euro area country  
               EU: non-euro area country, member of the European Union  
               EEA: non-EU country, member of the European Economic Area  
               Other: all other European countries |
| 3 Short name | Short or abbreviated name of the CSD used for commercial purposes and/or within ECSDA | Free text |
| 4 Full legal name | Official name of the CSD in English or in local language | Free text |
| 5 Registered address | Full address of the CSD head office | Free text |
| 6 Banking license | Indicates whether the CSD is licensed as a credit institution | Yes or No |
| 7 Designated SSS (SFD) | Indicates whether the CSD is designated as securities settlement system (SSS) under the EU Settlement Finality Directive (SFD) | Yes or No |
| 8 Eurosyste eligible SSS | Indicates whether the CSD is eligible for use in the collateralisation of Eurosystem credit operations following a positive assessment against the Eurosystem user standards | Yes or No |

See http://www.ecb.int/stats/pdf/securities/sec_methodologicalnote_tcs.pdf
## 2. Corporate governance

<table>
<thead>
<tr>
<th>Column title</th>
<th>Description</th>
<th>Responses</th>
</tr>
</thead>
</table>
| 13 Ownership       | Describes the type of ownership structure of the CSD or its mother company   | **State-owned**: Public authorities (e.g. ministry, central bank) own more than 50% of the capital and/or the voting rights  
**User-owned**: More than 50% of the capital and/or voting rights are held by market participants and/or issuers using the services of the CSD  
**Exchange-owned**: More than 50% of the capital and/or voting rights are held by one or more securities exchanges  
**Hybrid**: None of the above categories apply (combination of the other models) |
| category           |                                                                             |                                                |
| 14 Ownership       | Brief overview of the ownership structure,                                   | Free text                                      |
| details            |                                                                             |                                                |
including the list of qualified holdings (major shareholders) with the % of capital they hold.

| 15 | Profit aim | Indicates whether the CSD is a for-profit or not-for-profit institution | FP: for profit  
NP: not for profit |
| 16 | Number of employees - Actual | Total number of employees working for the CSD as of 31 December (in case the CSD is not an independent legal entity or in case it shares human resources with other legal entities within the same corporate group, an estimation of the actual number of people actually working for the CSD is provided) | Number (no decimals) |
| 17 | Number of employees - FTEs | Total number of full time equivalents (FTEs) working for the CSD as of 31 December | Number (no decimals) |

### 3. CSD services

<table>
<thead>
<tr>
<th>Column title</th>
<th>Description</th>
<th>Responses</th>
</tr>
</thead>
</table>
| 18 Financial instruments | Indicates the types of financial instruments that are accepted by the CSD for deposit and/or settlement | Equities: ordinary shares, preferred shares and convertible shares  
ETFs: Exchange-traded funds  
Government bonds: fixed income securities issued by national or supranational public authorities with a maturity of more than 1 year  
Corporate bonds: fixed income securities issued by private sector entities with a maturity of more than 1 year  
T-bills: fixed income securities issued by national or supranational public authorities with a maturity of less than 1 year  
Commercial paper: fixed income securities issued by private sector entities with a maturity of less than 1 year  
Investment funds: units in collective investment schemes (UCITS), units in... |

7 including variable interest or zero coupon securities, convertible bonds, bonds with warrants attached and medium-term notes.
various types of open-ended funds, pension funds and/or real estate funds  
**Rights and warrants:** warrants, allotment rights, subscription rights, other rights issues  
**Carbon emission rights:** Certified Emission Rights and EU Emission Allowances

<table>
<thead>
<tr>
<th>19</th>
<th>Other</th>
<th>Indicates other types of financial instruments that are accepted by the CSD for deposit and/or settlement</th>
<th>Free text</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>NNA</td>
<td>Indicates whether the CSD act as national numbering agency (NNA)</td>
<td>Yes or No</td>
</tr>
</tbody>
</table>

### 4. CSD users

<table>
<thead>
<tr>
<th>Column title</th>
<th>Description</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Domestic participants</td>
<td>Number of direct participants, i.e. direct account holders in a tiered system, and account operators in case of non-tiered systems. Participants include banks, other intermediaries, central banks, CCPs, other (I)CSDs and any other entities maintaining securities accounts at the CSD. Participants do not include retail investors nor issuers using the CSD’s registration service. Domestic participants are those located (incorporated) in the same country as the CSD*</td>
<td>Number (no decimals)</td>
</tr>
<tr>
<td>22 Non-domestic participants</td>
<td>Same as above, but includes those participants located (incorporated) in a different country from that where the CSD is established*</td>
<td>Number (no decimals)</td>
</tr>
<tr>
<td>23 Total number of participants*</td>
<td>Sum of domestic and non-domestic participants*</td>
<td>Number (no decimals)</td>
</tr>
<tr>
<td>24 Number of securities accounts</td>
<td>Number of securities accounts opened by participants at the level of the CSD as of 31 December (including sub-accounts and, in non-tiered systems, beneficial owner accounts)</td>
<td>Number (no decimals)</td>
</tr>
</tbody>
</table>

*If in a non-tiered system private investors have two types of accounts – holding accounts and trading accounts – and only the trading accounts are operated by an account operator (e.g. in Cyprus or Slovakia), the number of direct participants is the number of trading account operators.
5. Transactions

<table>
<thead>
<tr>
<th>Column title</th>
<th>Description</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Securities held on accounts</td>
<td>Securities held on accounts with the reporting CSD comprise those issued or safe-kept in the CSD, or transferred into the CSD through a link. A security may be issued or safe-kept in a CSD in paper form and, later, some units of this security may be physically removed from the CSD and transferred, for example, to the owners; those units are not considered to be securities held on accounts with the reporting CSD(^8)</td>
<td>Value in million (no decimals), EUR or local currency code</td>
</tr>
<tr>
<td>31 Number of deliveries</td>
<td>Delivery instructions cover all instructions to move securities between accounts. Trades cleared by a CCP relate to delivery instructions on a post-netting basis. Delivery instructions include instructions to block (and de-block) securities for collateralisation purposes on a borrowers’ securities account with the CSD, as well as securities movements owing to automatic securities lending or automatic collateralisation (including self-collateralisation).</td>
<td>Number in thousands (no decimals)</td>
</tr>
</tbody>
</table>

\(^8\) If needed, ECSDA converts non-EUR amounts into EUR based on the prevailing exchange rate as at 31 December of the relevant year.
If there is segregation on a participant’s account with the CSD, delivery instructions to move securities from the participant’s own account to his omnibus account and vice versa are included. Similarly, if in a non-tiered system (like Finland), securities are transferred from one account to another and both accounts have the same account operator, delivery instructions related to these transactions are included. An instruction to transfer two (or more) different securities is included as two (or more) instructions. Delivery instructions for the settlement of transactions between two clearing members of the CCP and also delivery instructions to transfer collateral from a clearing member to the CCP and back are included*.

| 32 | Delivery instructions | Same as above* | Value in million (no decimals), EUR or local currency code |