CSD Factbook

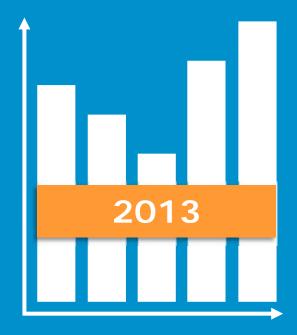






Table of contents

INTRODUCTION	3
SECTION A: THE CSD LANDSCAPE IN EUROPE	4
1. LEGAL FRAMEWORK	4
1.1 Countries covered	4
2. CORPORATE GOVERNANCE	7
2.1 Ownership models	<i>7</i> 9
3. Services	11
3.1 Financial instruments accepted for settlement	11
4. Users	13
4.1 Participants	14
5. SECURITIES TRANSACTIONS	16
5.1 Securities held in CSDs	

SECTION B: INDIVIDUAL FACTSHEETS	18
AT - OeKB	
BA/RS - Central Registry of Securities JSC Banja Luka	
BA - Registry of Securities (RVP)	•
BE - BNY Mellon CSD	
BE - Euroclear Bank	
BE - Euroclear Belgium	
BG - Central Depository AD (CDAD)	
CH - SIX SIS	
CY - Cyprus Stock Exchange (CSE)	
CZ - Central Securities Depository Prague (CSD Prague	
DE - Clearstream Banking Frankfurt (CBF)	
DK - VP Securities	
EE - Estonian CSD	
ES - Iberclear	
FI - Euroclear Finland	
FR - Euroclear France	
GR - Hellenic Central Securities Depository (ATHEXCS)	
HR - Central Depository & Clearing Company (SKDD).	•
HU - KELER	
IS - Icelandic Securities Depository (ISD)	
IT – Monte Titoli	
LT - Central Securities Depository of Lithuania (CSDL)	
LU - Clearstream Banking Luxembourg (CBL)	
LU - LuxCSD	
LV - Latvian Central Depository (LCD)	
ME - Central Depository Agency (CDA) of Montenegro	
MK - CSD AD Skopje	
MT - Malta Stock Exchange (MSE)	
NL - Euroclear Nederland	
NO - VPS	
PL - KDPW	
PT - Interbolsa	
RO - Depozitarul Central	
RS - Central Securities Depository and Clearing House	
RU - National Settlement Depository (NSD)	
SE – Euroclear Sweden	
SI - Central Securities Clearing Corporation (KDD)	
• , , , , ,	
SK - Central Securities Depository of the Slovak Repul	
TR - Central Securities Depository of Turkey (MKK)	
UA - National Depository of Ukraine (NDU)UK - Euroclear UK & Ireland (EUI)	
UN - EULUCIEAL UN & ILEIAHU (EUI)	59
ANNEY: 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 depositories, unless otherwise specified. CSDs are mostly referred to using their short names (see Table 1).

Table 1. List of ECSDA members

Country	Short name
AT	OeKB
BA	CR HoV RS
BA	RVP
BE	BNY Mellon CSD
BE	Euroclear Bank
BE	Euroclear Belgium
BG	CDAD
CH	SIX SIS
CY	CSE
CZ	CDCP
DE	CBF
DK	VP
EE	ECSD
ES	Iberclear
FI	Euroclear Finland
FR	Euroclear France
GR	ATHEXCSD
HR	SKDD
HU	KELER
IS	ISD
IT	Monte Titoli

Country	Short name
LT	CSDL
LU	CBL
LU	LuxCSD
LV	LCD
ME	CDA
MK	CSD AD Skopje
MT	MSE
NL	Euroclear Nederland
NO	VPS
PL	KDPW
PT	Interbolsa
RO	Depozitarul Central
RS	CR HoV
RU	NSD
SE	Euroclear Sweden
SI	KDD
SK	CDCP SR
TR	MKK
UA	NDU
UK	Euroclear UK & IE

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://ecsda.eu/facts/2013database

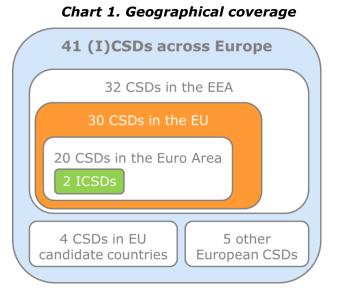
Section A: The CSD landscape in Europe

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 countries and represented remained stable compared to 2012, the composition of ECSDA members changed in 2013-2014. Settlement Center JSC (Ukraine) 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. VPLux, 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

Rules	Author	Year
Settlement Finality Directive	European Union	1998
Principles for Financial Market Infrastructures	CPSS and IOSCO	2012
Eurosystem Assessment Framework for SSSs and links	Eurosystem	2014
CSD Regulation	European Union	2014

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)¹ 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

¹ See BIS (1992), "Delivery versus Payment in Securities Settlement Systems", available at: http://www.bis.org/publ/cpss06.pdf

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

	SECURITIES TRANSFER	CASH TRANSFER
MODEL 1	Gross	Gross
MODEL 2	Gross	Net
MODEL 3	Net	Net

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.

2. Corporate Governance

2.1 Ownership models

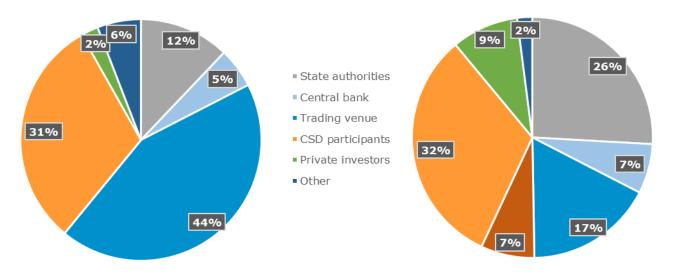
Given the diversity of corporate structures and ownership models of CSDs, collecting information on CSD ownership is not an easy task. In order to provide a more accurate picture of CSD owners across Europe, ECSDA decided to refine its methodology as of 2013. Instead of merely looking at the majority 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

2a. EU CSDs

2b. Non-EU European 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 4. Type of shareholders owning 50% of the shares or more in a CSD

Majority shareholder(s)	CSDs	No. of CSDs
Trading venue (securities	CSD Prague (100%), CBF (100%), Estonian	14 (34%)
exchange)	CSD (100%), Iberclear (100%), ATHEXCSD	
	(100%), ISD (100%), CSDL (100%), CBL	
	(100%), LCD (100%), Interbolsa (100%),	
	NSD (100%), CDCP SR (100%), Monte Titoli	
	(98.8%), Depozitarul Central (69%)	
CSD participants	Euroclear Bank (100%), Euroclear Belgium	11 (27%)
	(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%)	
The State (state authorities	CR HoV (100%), CSE (100%), MSE (100%),	7 (17%)
and/or central banks)	RVP (75%), SKDD (62.3%), KDPW (66.6%),	
	KELER (53.3%)	
Other (banks, private	BNY Mellon CSD (100% BNY Mellon	4 (10%)
investors, CCPs)	Corporation), VPS (71.7% various institutional	
	investors), MKK (64.9% Takasbank), KDD	
	(56% banks, management companies etc.)	
No majority shareholder	CDAD (43% State, 37% CSD participants,	5 (12%)
	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)	

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 companies²;
- 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.

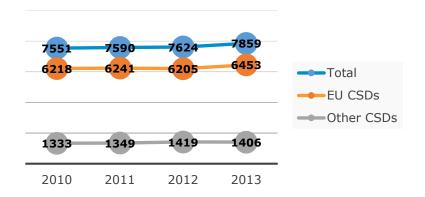
Finally, 5 CSDs have a hybrid ownership structure with **no single majority shareholder type**.

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



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

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.

3.1 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.

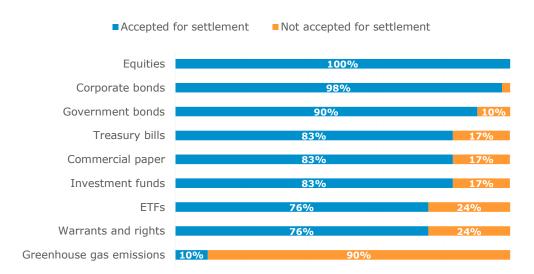


Chart 4. Financial instruments accepted for settlement in European CSDs

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 Luxembourg³. 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

4.1 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

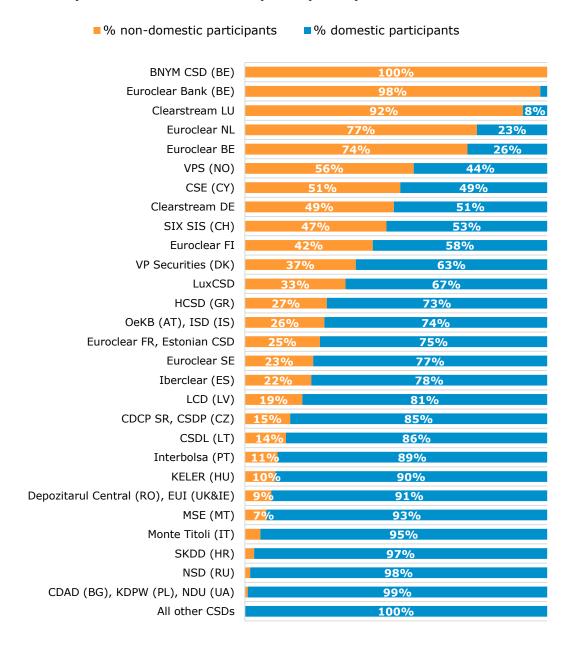


Chart 5 reveals important differences regarding the balance between domestic and non-domestic participants. On average, leaving the ICSDs aside (since they are by nature not operating in a domestic environment), European CSDs had slightly over 23% of non-domestic participants in 2013, down from 26% in 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

CSD	Number of securities accounts
MKK (Turkey)	43,010,710
Depozitarul Central (Romania)	9,090,127
CR HoV (Serbia)	8,388,970
VP Securities (Denmark)	3,400,000
Euroclear Sweden	3,165,453

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

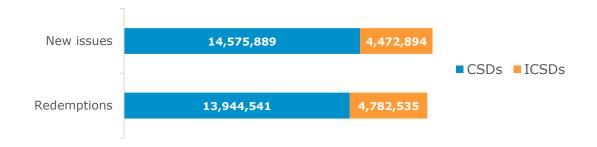
CSD	Number of securities accounts
Interbolsa (Portugal)	827
Euroclear Nederland	815
Euroclear Belgium	638
Iberclear (Spain)	381
LuxCSD (Luxembourg)	20

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)



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)

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 operation⁴, 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 2013.⁵

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

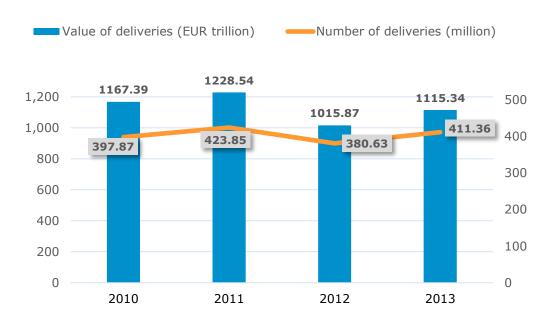
⁴ Based on the assumption of an average of 256 days of operation.

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 trillion⁶. 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.



OeKB

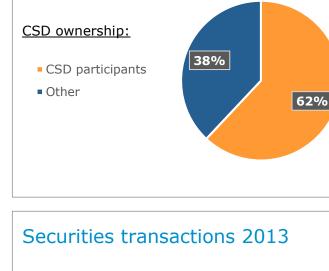
Oesterreichische Kontrollbank AG, Strauchgasse 3, 1011 Vienna, Austria www.oekb.at

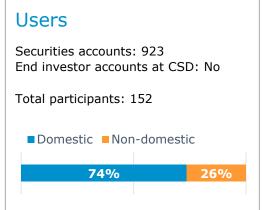
Corporate information

61 employees (61 FTEs)

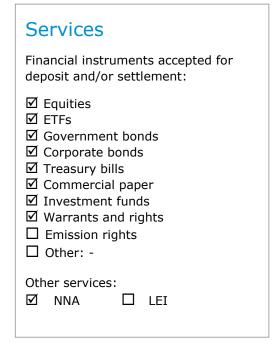
For profit

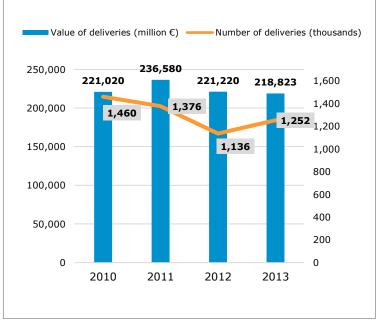
Basic information ☑ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 (OTC transactions) ☐ Model 2 ☑ Model 3 (On-exchange transactions)





New issues (EUR million)	53,309
Redemptions (EUR million)	37,526
Value of securities held on accounts (EUR million)	509,066
Value of deliveries (EUR million)	218,823
Number of deliveries (thousands)	1,252







Central Registry of Securities JSC Banja Luka (CR HoV RS)

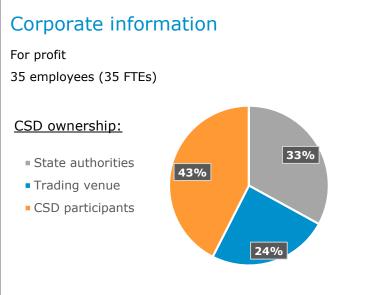
Centralni registar hartija od vrijednosti a.d. Banja Luka, Sime Šolaje 1, 78000 Banjaluka, Republic of Srpska Bosnia and Herzegovina

www.crhovrs.org

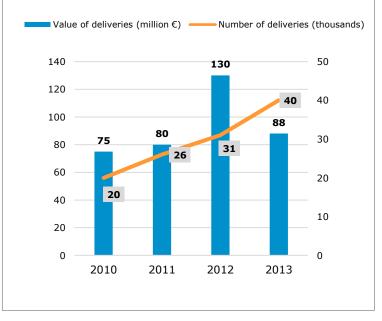
Basic information ☐ Banking license ☐ Designated SSS ☐ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☑ Model 1 (Money market transactions) ☑ Model 2 (On-exchange transactions) ☐ Model 3



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 ☐ IFT



New issues (EUR million)	169
Redemptions (EUR million)	349
Value of securities held on accounts (EUR million)	7,488
Value of deliveries (EUR million)	88
Number of deliveries (thousands)	40





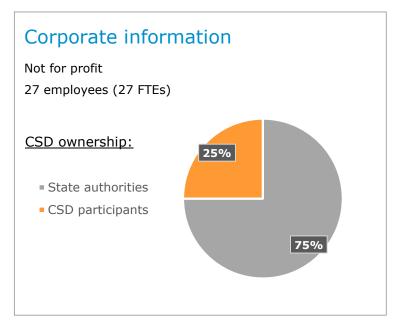
Registry of Securities (RVP)

Registar vrijednosnih papira u Federeciji Bosne i Hercegovine, Maršala Tita 62/II, 71000 Sarajevo, Bosnia and Herzegovina www.rvp.ba

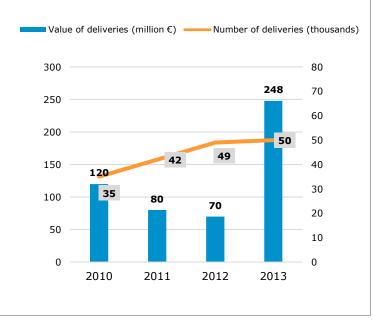
Basic information ☐ Banking license ☐ Designated SSS ☐ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☑ Model 1 (T-bills) ☑ Model 2 (On-exchange transactions) ☐ Model 3

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



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

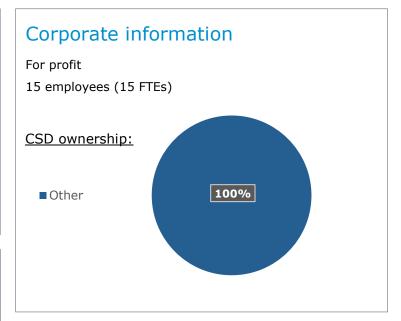




BNY Mellon CSD

BNY Mellon CSD SA/NV, 46 rue Montoyer, 1000 Brussels, Belgium www.bnymellon.com/centralsecuritiesdepository/index.html

Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 ☐ Model 2 ☐ Model 3





New issues (EUR million)	0
Redemptions (EUR million)	0
Value of securities held on accounts (EUR million)	0

0

0

Securities transactions 2013

Value of deliveries (EUR 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: ☐ LEI □ NNA



Euroclear Bank

Euroclear Bank, 1 Boulevard du Roi Albert II, 1210 Brussels, Belgium www.euroclear.com

Basic information

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

BIS settlement model:

- ☑ Model 1
- ☐ Model 2
- ☐ Model 3

Users

Securities accounts: 21,518 End investor accounts at CSD: No

Total participants: 1,474



2%	98%		

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

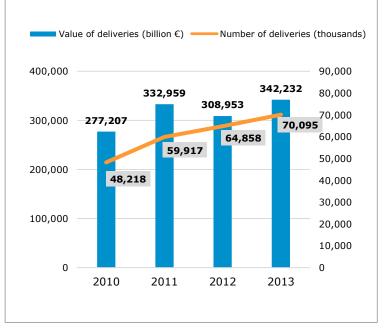
Other services:

✓ NNA





New issues (EUR million)	3,041,423
Redemptions (EUR million)	3,865,455
Value of securities held on accounts (EUR million)	10,614,296
Value of deliveries (EUR million)	342,231,890
Number of deliveries (thousands)	70,095

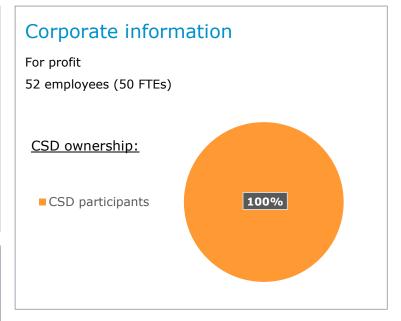




Euroclear Belgium

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



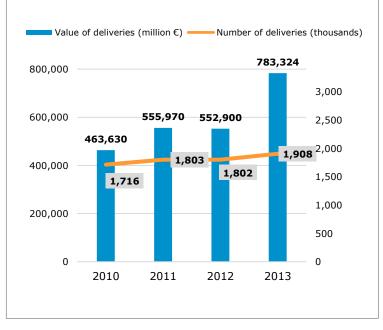


New issues (EUR million)13,602Redemptions (EUR million)3,220

Securities transactions 2013

Redemptions (EUR million)3,220Value of securities held on accounts (EUR million)202,745Value of deliveries (EUR million)783,324Number of deliveries (thousands)1,908

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: VVPR strips Other services: □ NNA ☐ LEI





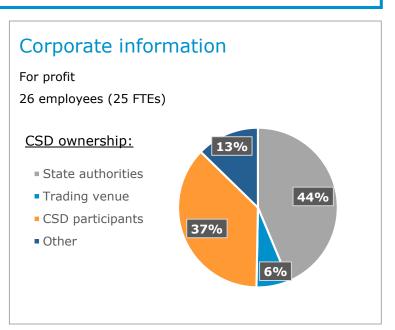
Central Depository AD (CDAD)

Central Depository AD, 6 Tri Ushi Str., 1000 Sofia, Bulgaria www.csd-bg.bq

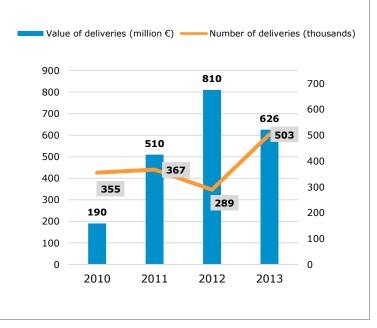
Basic information ☐ Banking license ☑ Designated SSS ☐ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☐ Model 1 ☑ Model 2 ☐ Model 3



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 services: ✓ NNA ☐ IFT



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

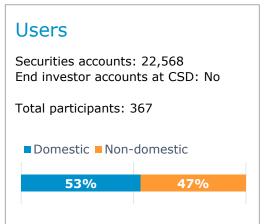




SIX SIS Ltd, Baslerstrasse 100, 4600 Olten, Switzerland www.six-securities-services.com







Financial instruments accepted for

☐ LEI

deposit and/or settlement:

☑ Government bonds

☑ Commercial paper

☑ Investment funds

 \square Emission rights

☐ Other: -

✓ NNA

Other services:

☑ Warrants and rights

☑ Corporate bonds

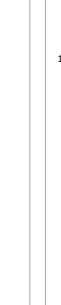
☑ Treasury bills

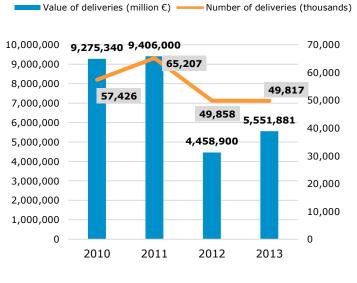
Services

☑ Equities

☑ ETFs

New issues (EUR million)	170,518
Redemptions (EUR million)	49,914
Value of securities held on accounts (EUR million)	2,349,325
Value of deliveries (EUR million)	5,551,881
Number of deliveries (thousands)	49,817





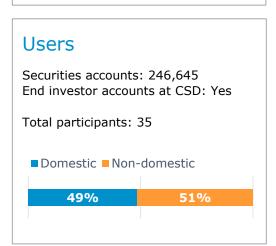


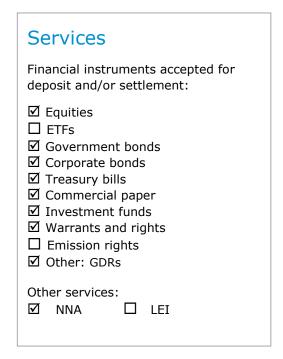
Cyprus Stock Exchange (CSE)

Cyprus Stock Exchange, 71-73 Lordou Vironos Avenue, 1096 Nicosia, Cyprus

www.cse.com.cy

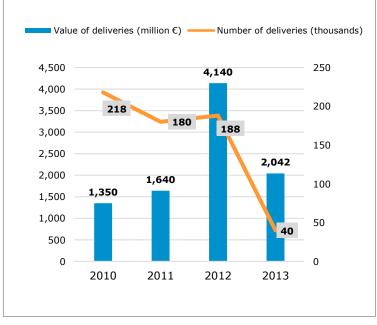
Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☑ Model 1 (OTC transactions) ☑ Model 2 (On-exchange transactions) ☐ Model 3







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





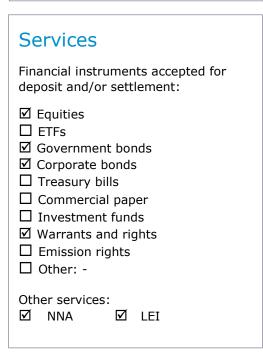
Central Securities Depository Prague (CSD Prague)

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

www.centralnidepozitar.cz

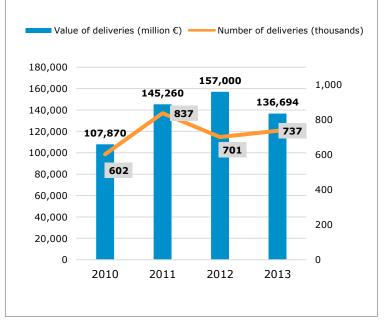
Basic information □ Banking license ☑ Designated SSS □ Eurosystem eligible SSS □ T2S BIS settlement model: ☑ Model 1 ☑ Model 2 □ Model 3







New issues (EUR million)	8,577
Redemptions (EUR million)	1,215
Value of securities held on accounts (EUR million)	111,259
Value of deliveries (EUR million)	136,694
Number of deliveries (thousands)	737



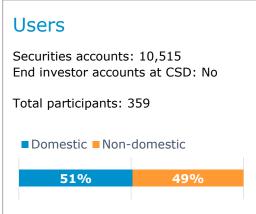
clearstream | DEUTSCHE BÖRSE | Clearstream Banking Frankfurt (CBF)

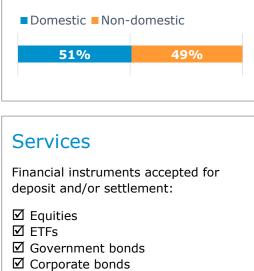
Clearstream Banking AG, Mergenthalerallee 61, 65760 Eschborn, Germany

www.clearstream.com









☐ LEI

☑ Treasury bills

☑ Commercial paper

☑ Investment funds

☑ Emission rights

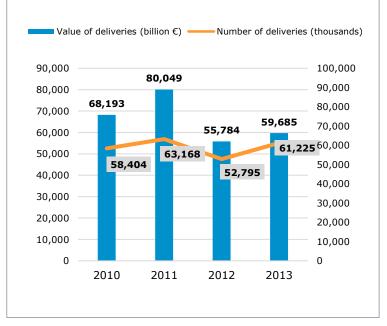
☐ Other: -

□ NNA

Other services:

☑ Warrants and rights

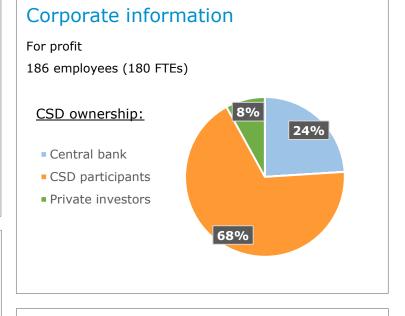
New issues (EUR million) 4,455,459 Redemptions (EUR million) 4,160,427 Value of securities held on accounts (EUR million) 6,376,067 Value of deliveries (EUR million) 59,684,747 Number of deliveries (thousands) 61,225





VP Securities A/S, Weidekampsgade 14, 2300 Copenhagen S, Denmark www.vp.dk

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



Users Securities accounts: 3,400,000 End investor accounts at CSD: Yes Total participants: 177 ■ Domestic ■ Non-domestic 63%

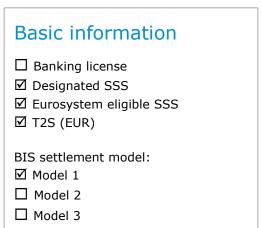
New issues (EUR million)	248,209
Redemptions (EUR million)	266,785
Value of securities held on accounts (EUR million)	907,575
Value of deliveries (EUR million)	6,257,296
Number of deliveries (thousands)	13,065

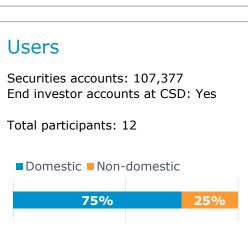


Valu	ıe of deliveries ((million €)	Number of	deliveries	(thousands)
8,000,000		7,1	56,610		16,000
7,000,000	5 000 050	6,189,570	6,2	57,296	14,000
6,000,000	5,820,850			13,00	55 12,000
5,000,000	11,94	7 11,211			10,000
4,000,000			10,367		8,000
3,000,000					6,000
2,000,000					4,000
1,000,000					2,000
0					0
	2010	2011	2012	2013	

NASDAQ OMX Estonian CSD

Eesti Väärtpaberikeskus AS, Tartu St. 2, Tallinn 10145, Estonia www.e-register.ee

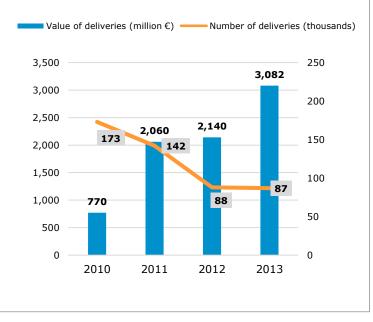




Services Financial instruments accepted for deposit and/or settlement: ☑ Equities **☑** ETFs ☑ Government bonds ☑ Corporate bonds ☑ Treasury bills ☑ Commercial paper ☑ Investment funds ☑ Warrants and rights ☐ Emission rights ☐ Other: -Other services: ☐ LEI ☑ NNA



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





Iberclear

Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores, S.A. Unipersonal, Plaza de la Lealtad, 1 28014 Madrid, Spain

www.iberclear.com

Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 (CADE Platform) ☑ Model 2 (SCLV Platform) ☐ Model 3





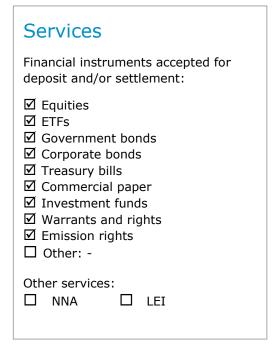
New issues (EUR million) 533,238 Redemptions (EUR million) 516,588

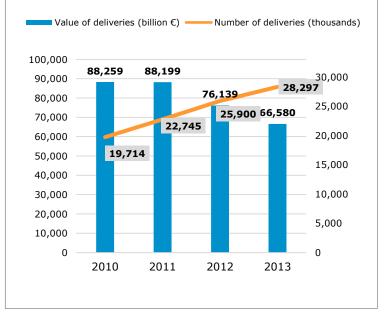
Securities transactions 2013

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







Euroclear Finland

Euroclear Finland Ltd, Urho Kekkosen katu 5 C, FI-00100 Helsinki, Finland

www.euroclear.com

Basic information

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

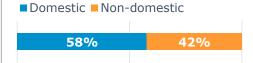
BIS settlement model:

- ☑ Model 1
- ☐ Model 2
- ☐ Model 3

Users

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

Total participants: 26



Services

Financial instruments accepted for deposit and/or settlement:

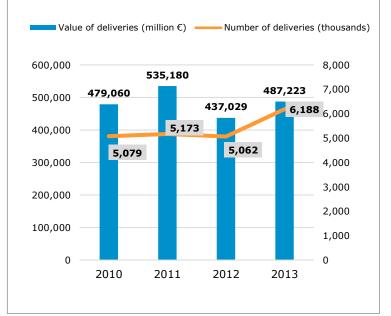
- ☑ Equities
- $\ensuremath{\overline{\square}}$ ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- ☐ Emission rights
- ☑ Other: Finnish Depositary Receipts (FDR)

Other services:

☑ NNA ☐ LEI



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





Euroclear France

Euroclear France, 66 rue de la Victoire 75009 Paris, France www.euroclear.com

Basic information

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

BIS settlement model:

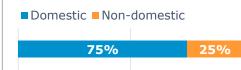
- ☑ Model 1
- ☐ Model 2
- ☐ Model 3

Users

Securities accounts: 1,157

End investor accounts at CSD: No

Total participants: 157



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: -

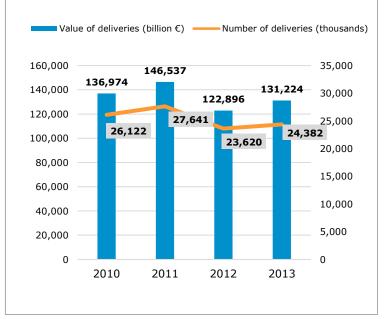
Other services:

✓ NNA





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)	131,223,615
Number of deliveries (thousands)	24,382

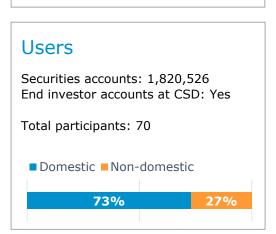


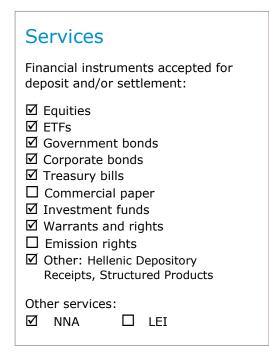


ATHEXCSD

Hellenic Central Securities Depository SA, 110 Athinon Avenue, 104 42 Athens, Greece
www.helex.gr

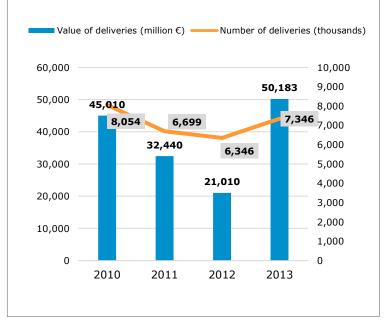
Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☑ Model 1 (beneficiary account level) ☑ Model 2 (net on cash at participant cash account level) ☐ Model 3







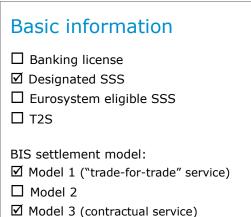
New issues (EUR million)	6,748
Redemptions (EUR million)	0
Value of securities held on accounts (EUR million)	68,050
Value of deliveries (EUR million)	50,183
Number of deliveries (thousands)	7,346

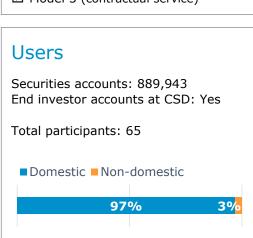




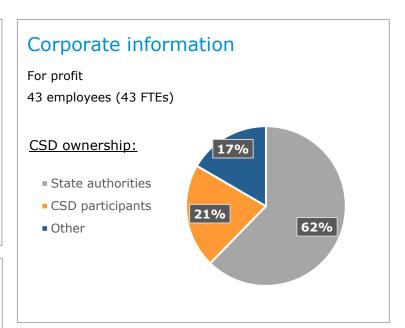
Central Depository & Clearing Company Inc. (SKDD)

Središnje klirinško depozitarno društvo d.d., Heinzelova 62a, 10000 Zagreb, Croatia www.skdd.hr

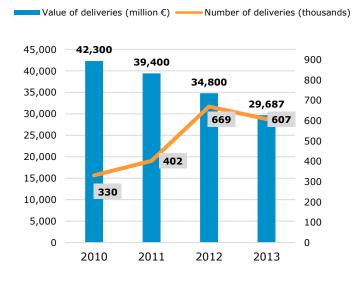




Services Financial instruments accepted for deposit and/or settlement: ☑ Equities ☐ ETFs ☑ Government bonds ☑ Corporate bonds ☑ Treasury bills ☑ Commercial paper ☐ Investment funds ☐ Warrants and rights ☐ Emission rights ☑ Other: Croatian government rights, Certificates Other services: ✓ NNA ☐ LEI



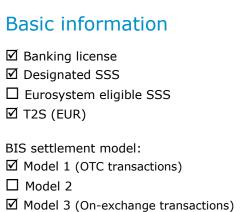
New issues (EUR million)	6,072
Redemptions (EUR million)	5,495
Value of securities held on accounts (EUR million)	42,904
Value of deliveries (EUR million)	29,687
Number of deliveries (thousands)	607



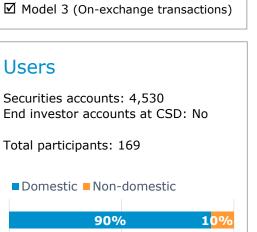


KELER

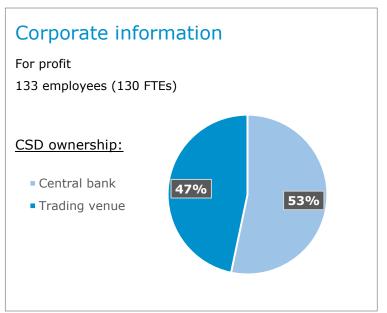
KELER Ltd, 70-72 Rákóczi Street, 1074 Budapest, Hungary www.keler.eu



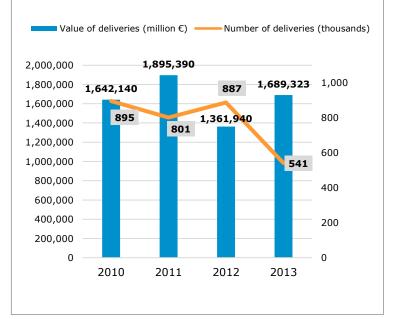
Users



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: ☐ LEI ☑ NNA



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

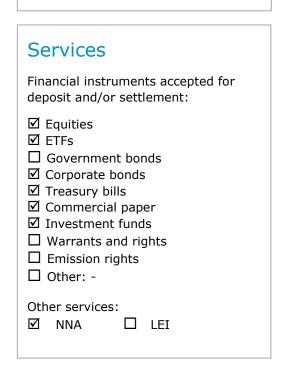


NASDAQ DMX Icelandic Securities Depository (ISD)

Verðbréfaskráning íslands, Laugavegur 182, 105 Reykjavik, Iceland www.vbsi.is

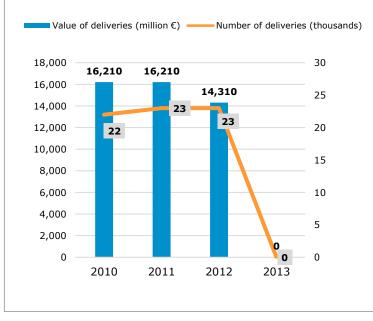








New issues (EUR million)	1,487
Redemptions (EUR million)	1,725
Value of securities held on accounts (EUR million)	21,726
Value of deliveries (EUR million)	0
Number of deliveries (thousands)	0



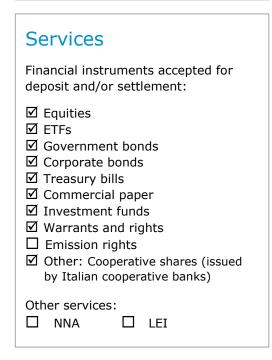


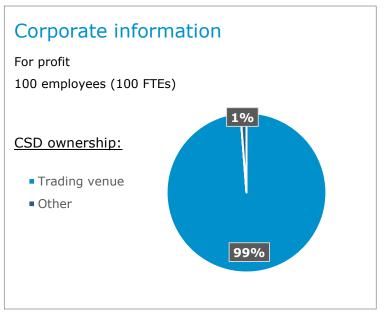
Monte Titoli

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

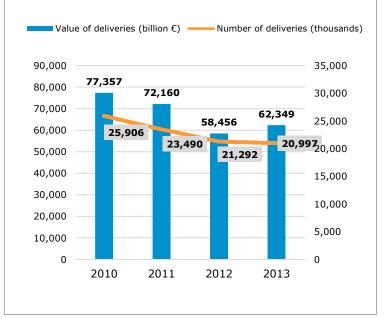
Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 (Most of the daytime cycle) ☑ Model 2 ☑ Model 3 (Overnight batch)







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

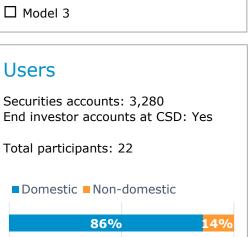


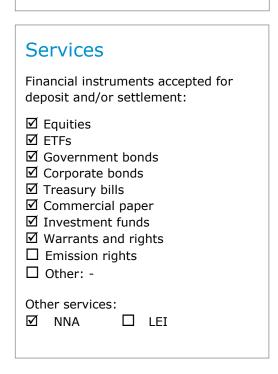
NASDAQ OMX Central Securities Depository of Lithuania (CSDL)

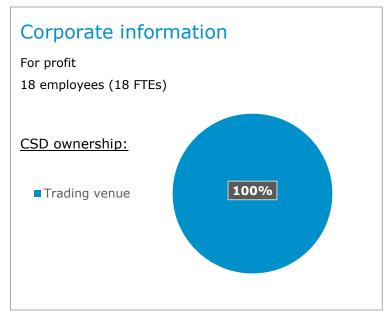
Lietuvos centrinis vertybinių popierių depozitoriumas, Lvovo g. 25, 9320 Vilnius, Lithuania www.csdl.lt

Basic information ☐ Banking license ☑ Designated SSS \square Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 ☑ Model 2 ☐ Model 3

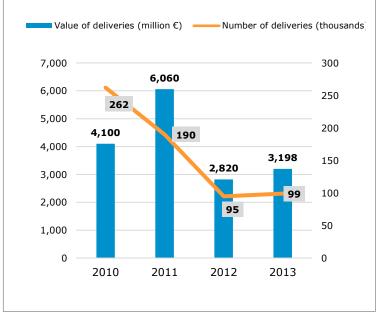
Users







New issues (EUR million)	1,805
Redemptions (EUR million)	1,485
Value of securities held on accounts (EUR million)	10,847
Value of deliveries (EUR million)	3,198
Number of deliveries (thousands)	99



clearstream | DEUTSCHE BÖRSE GROUP

Clearstream Banking Luxembourg (CBL)

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

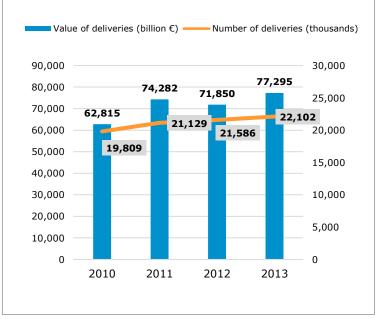
Basic information ☑ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☑ T2S BIS settlement model: ☑ Model 1 ☐ Model 2 ☐ Model 3





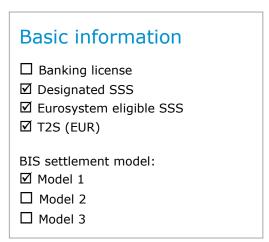


New issues (EUR million)	1,431,471
Redemptions (EUR million)	917,080
Value of securities held on accounts (EUR million)	5,206,336
Value of deliveries (EUR million)	77,295,235
Number of deliveries (thousands)	22,102



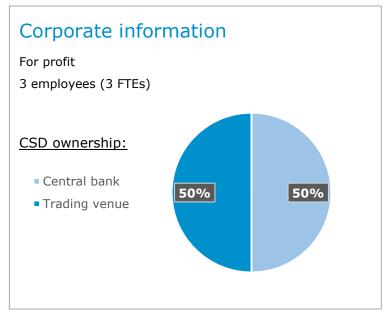


LuxCSD SA, 43 Avenue Monterey, 2163 Luxembourg www.luxcsd.com

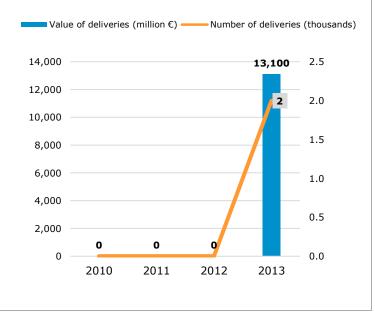




Services Financial instruments accepted for deposit and/or settlement: **☑** Equities **☑** FTFs ☑ Government bonds ☑ Corporate bonds ☑ Treasury bills ☑ Commercial paper ☑ Investment funds ☑ Warrants and rights ☐ Emission rights ☐ Other -Other services: ✓ LEI □ NNA



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



NASDAQ OMX Latvian Central Depository (LCD)

Latvijas Centrālais depozitārijs, Valnu iela 1, Riga LV-1050, Latvia www.nasdagomxbaltic.com

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

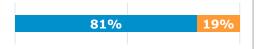
Users

Securities accounts: 881

End investor accounts at CSD: No

Total participants: 21

■ Domestic ■ Non-domestic



Services

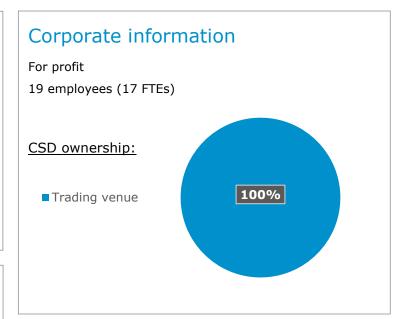
Financial instruments accepted for deposit and/or settlement:

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

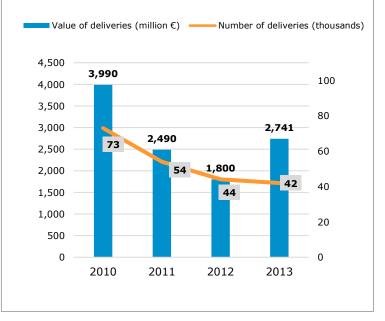
Other services:

✓ NNA

□ IFT



New issues (EUR million)	718
Redemptions (EUR million)	813
Value of securities held on accounts (EUR million)	3,225
Value of deliveries (EUR million)	2,741
Number of deliveries (thousands)	42



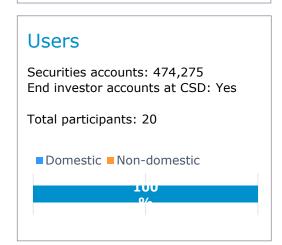


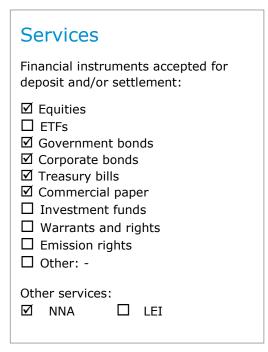
Central Depository Agency (CDA) of Montenegro

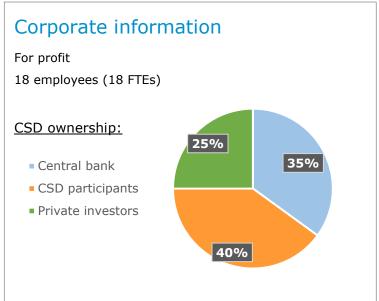
Centralna Depozitarna Agencija A.D. Podgorica, Novaka Miloseva bb, 81000 Podgorica, Montenegro

www.cda.me

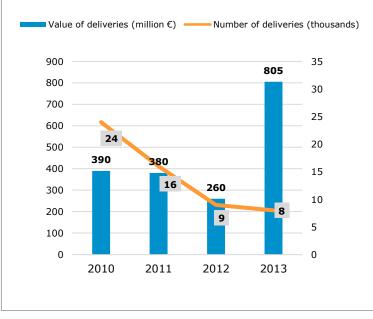
Basic information □ Banking license □ Designated SSS □ Eurosystem eligible SSS □ T2S (EUR) BIS settlement model: ☑ Model 1 ☑ Model 2 □ Model 3







New issues (EUR million)	52
Redemptions (EUR million)	1
Value of securities held on accounts (EUR million)	5,203
Value of deliveries (EUR million)	805
Number of deliveries (thousands)	8

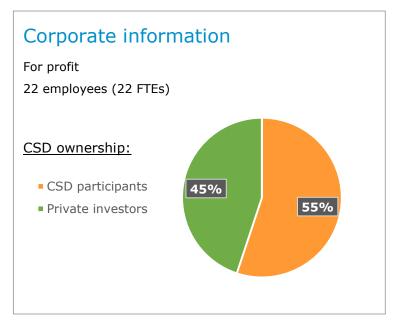




CSD AD Skopje

Central Securities Depository AD Skopje (Centralen depozitar za hartii od vrednost AD Skopje), bul. Kuzman Josifovski Pitu 1 Skopje, MK www.cdhv.mk

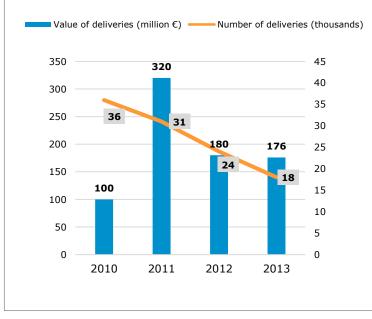
Basic information □ Banking license □ Designated SSS □ Eurosystem eligible SSS □ T2S BIS settlement model: ☑ Model 1 (Government securities, OTC transactions) ☑ Model 2 □ Model 3



Users Securities accounts: 264,176 End investor accounts at CSD: Yes Total participants: 13 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

New issues (EUR million)	1,740
Redemptions (EUR million)	1,570
Value of securities held on accounts (EUR million)	5,074
Value of deliveries (EUR million)	176
Number of deliveries (thousands)	18



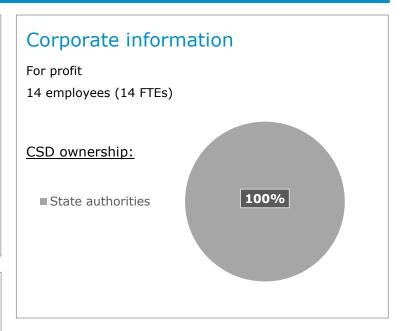


Malta Stock Exchange (MSE)

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

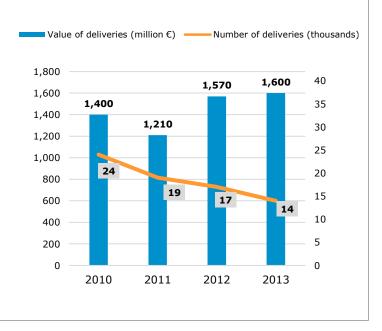


Users Securities accounts: 244,785 End investor accounts at CSD: Yes Total participants: 14 Domestic Non-domestic 93% 7%

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

Securities transactions 2013

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: ☐ LEI ☑ NNA





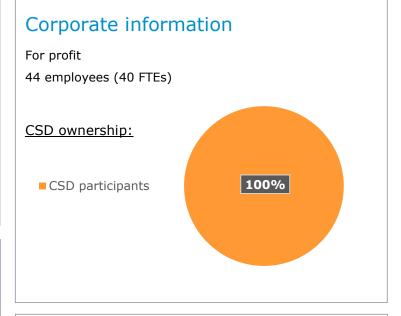
Post-trade made easy

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





Services

☑ Equities

☑ ETFs

deposit and/or settlement:

☑ Government bonds

☑ Corporate bonds

☑ Commercial paper

☑ Investment funds

☐ Emission rights

Other services:

☐ Other: -

✓ NNA

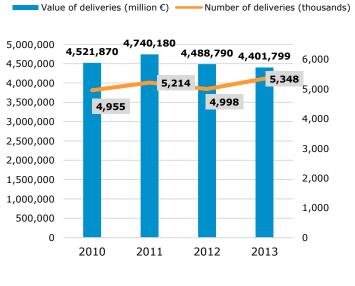
☑ Warrants and rights

☐ LEI

☑ Treasury bills

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



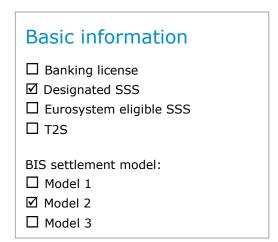


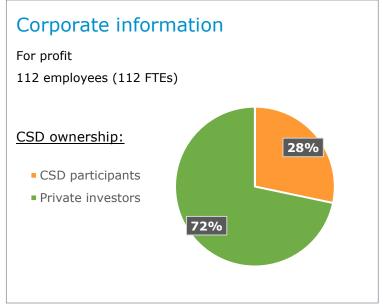


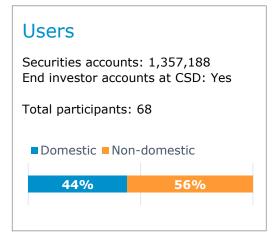
VPS

The Norwegian Central Securities Depository (Verdipapirsentralen ASA), Fred. Olsens gate 1., 0051 Oslo, Norway

www.vps.no







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

18,000

16,000

12,000

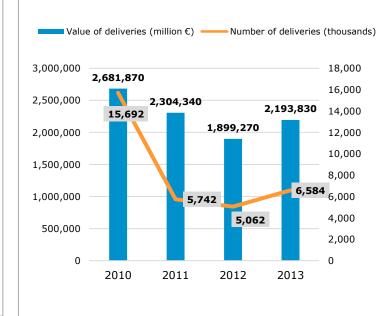
10,000

8,000

4,000

2,000

0







KDPW

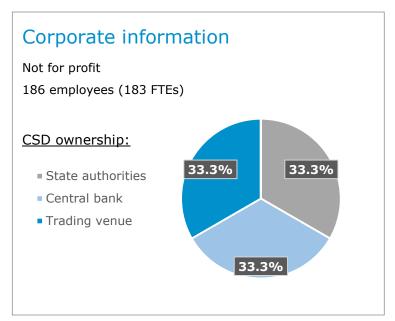
Central Securities Depository of Poland

The Central Securities Depository of Poland (Krajowy Depozyt Papierów Wartościowych S.A.), 4 Książęca St, 00-498 Warsaw, Poland www.kdpw.pl

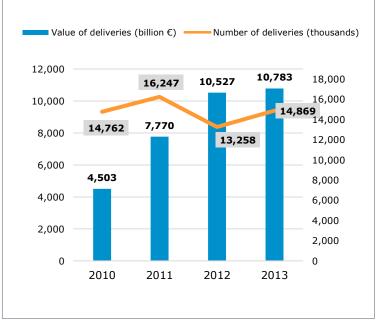
Basic information ☐ Banking license ☑ Designated SSS ☐ Eurosystem eligible SSS ☐ T2S (EUR) BIS settlement model: ☑ Model 1 ☑ Model 2 (batch cycle) ☐ Model 3







New issues (EUR million)	50,722
Redemptions (EUR million)	33,855
Value of securities held on accounts (EUR million)	303,495
Value of deliveries (EUR million)	10,782,960
Number of deliveries (thousands)	14,869





Interbolsa

Sociedade Gestora de Sistemas de Liquidação e de Sistemas Centralizados de Valores Mobiliários S.A., Avenida da Boavista 3433, 4100-138 Porto, Portugal www.interbolsa.pt

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

Users

Securities accounts: 827

End investor accounts at CSD: No

Total participants: 37



89% 1<mark>1</mark>%

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: -

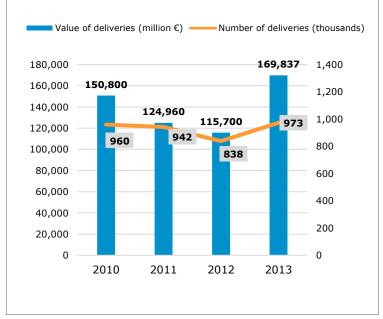
Other services:

✓ NNA





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



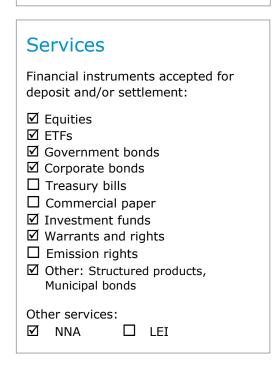


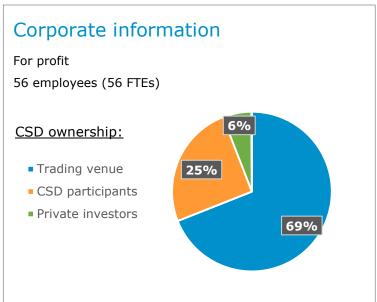
Depozitarul Central

Depozitarul Central SA, IBC Modern Building, 34 - 36 Carol I Boulevard, Floors 8, Bucharest 020922, Romania www.roclear.eu

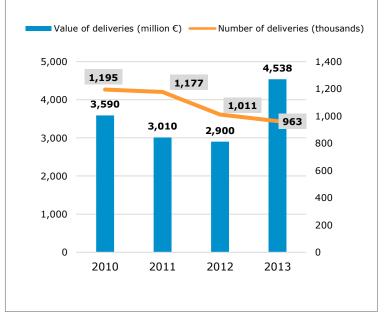
Basic information ☐ Banking license ☑ Designated SSS ☐ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 (OTC transactions) ☑ Model 2 (On-exchange transactions) ☐ Model 3







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

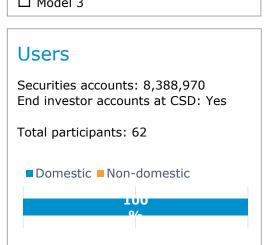


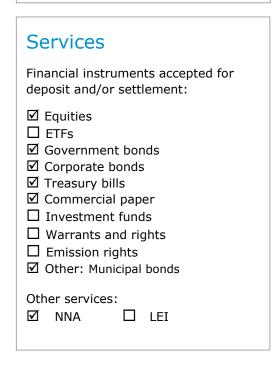


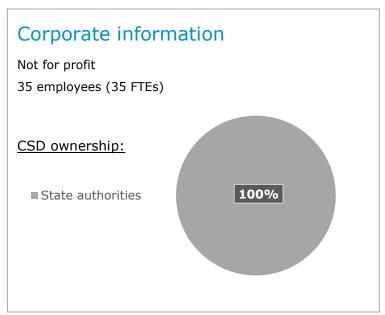
Central Securities Depository and Clearing House (CR HoV)

Centralni registar, depo i kliring hartija od vrednosti, Trg Nikole Pašića n°5, 11000 Belgrade, Serbia www.crhov.rs

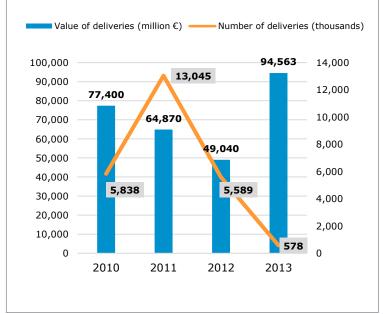
Basic information □ Banking license □ Designated SSS □ Eurosystem eligible SSS □ T2S BIS settlement model: □ Model 1 □ Model 2 □ Model 3







New issues (EUR million)	9,353
Redemptions (EUR million)	7,479
Value of securities held on accounts (EUR million)	36,489
Value of deliveries (EUR million)	94,563
Number of deliveries (thousands)	578

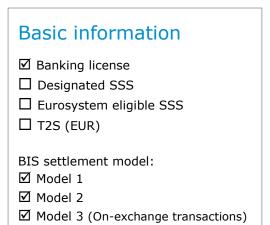




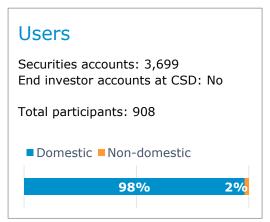
National Settlement Depository (NSD)

National Settlement Depository, 12, Spartakovskaya Street, Moscow 105066, Russia

www.nsd.ru



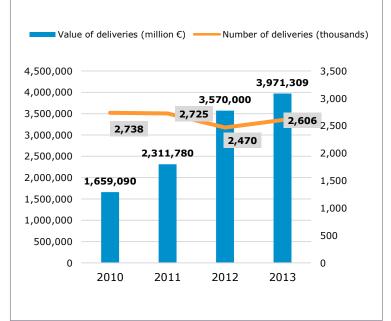






Securities transactions 2013

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, Depositary receipts Other services: ☑ LEI NNA





Euroclear Sweden

Euroclear Sweden AB, Klarabergsviadukten 63, 101 23 Stockholm, Sweden

www.euroclear.com

Basic information

- ☐ Banking license
- ☑ Designated SSS
- \square Eurosystem eligible SSS
- ☐ T2S

BIS settlement model:

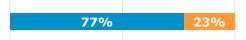
- ☑ Model 1
- ☐ Model 2
- ☐ Model 3

Users

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

Total participants: 53

■ 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: Lottery bonds, Swedish Depositary Receipts (SDB)

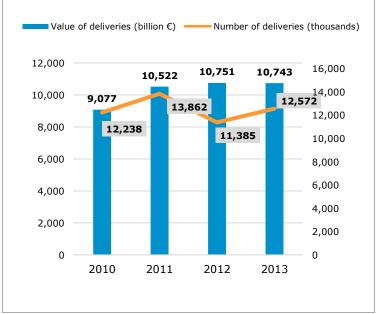
Other services:

✓ NNA





New issues (EUR million)	1,096,797
Redemptions (EUR million)	1,007,802
Value of securities held on accounts (EUR million)	1,285,401
Value of deliveries (EUR million)	10,743,360
Number of deliveries (thousands)	12,572





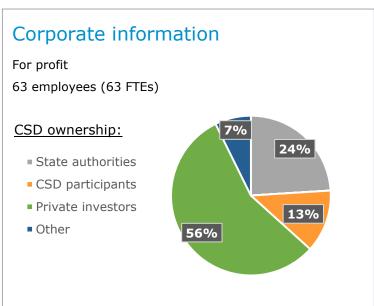
Central Securities Clearing Corporation (KDD)

Centralna klirinško depotna družba, d.d., Tivolska cesta 48, 1000 Ljubljana, Slovenia <u>www.kdd.si</u>

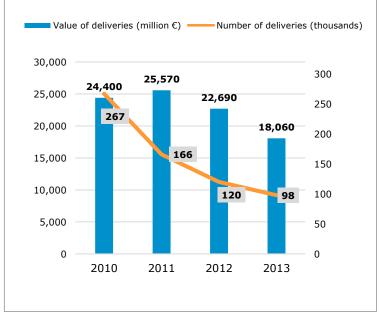
Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 (OTC DvP transactions) ☑ Model 2 (On-exchange transactions) ☐ Model 3



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 □ IFT



New issues (EUR million)	4,771
Redemptions (EUR million)	3,334
Value of securities held on accounts (EUR million)	25,553
Value of deliveries (EUR million)	18,060
Number of deliveries (thousands)	98

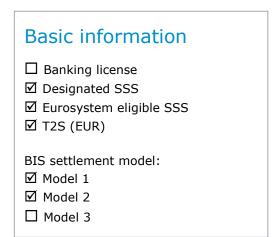




Central Securities Depository of the Slovak Republic (CDCP SR)

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

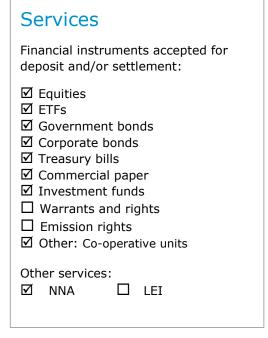
www.cdcp.sk





Users Securities accounts: 499,389 End investor accounts at CSD: Yes Total participants: 20 Domestic Non-domestic 86% 14%

New issues (EUR million)	9,946
Redemptions (EUR million)	9,583
Value of securities held on accounts (EUR million)	40,315
Value of deliveries (EUR million)	37,709
Number of deliveries (thousands)	147



Value of delive	eries (million €) 🗕	Number of d	eliveries (thousands)
45,000	41,530	40,440	250
40,000			,709—
35,000 — 32,29	0	250	200
30,000 —			_
25,000			147 150
20,000 —	122		
15,0001:	13		100
10,000			50
5,000			
0			0
2010	2011	2012 2	013

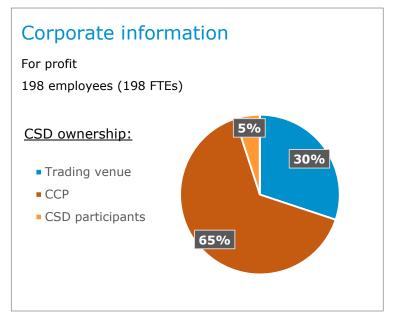


Central Securities Depository of Turkey (MKK)

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

www.mkk.com.tr

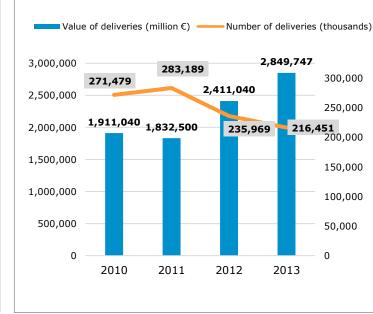
Basic information □ Banking license □ Designated SSS □ Eurosystem eligible SSS □ T2S BIS settlement model: ☑ Model 1 (Transactions between direct and indirect participants) □ Model 2 ☑ Model 3 (Exchange transactions between direct participants)



Users Securities accounts: 43,010,710 End investor accounts at CSD: Yes Total participants: 141 Domestic Non-domestic

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



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, Sukuks Other services: ☐ LEI □ NNA



National Depository of Ukraine (NDU)

Public Joint-Stock Company "National Depository of Ukraine", 3. B. Grinchenka Str. 01001 Kyiv, Ukraine

www.csd.ua

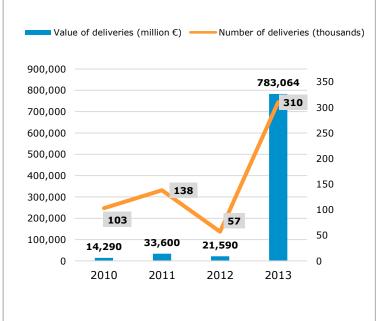
Basic information □ Banking license □ Designated SSS □ Eurosystem eligible SSS □ T2S BIS settlement model: ☑ Model 1 (OTC DvP transactions) □ Model 2 ☑ Model 3 (On-exchange DvP transactions)

Corporate information For profit 165 employees (154 FTEs) CSD ownership: State authorities Central bank CSD participants Private investors Other

Users Securities accounts: 10,980 End investor accounts at CSD: No Total participants: 362 Domestic Non-domestic

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



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: Investment certificates, government eurobonds, option certificates Other services: ☐ LEI $\overline{\mathbf{Q}}$ NNA



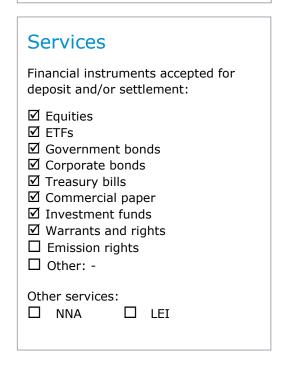
Euroclear UK & Ireland (EUI)

Euroclear UK and Ireland Limited, 33 Cannon Street, EC4M 5SB London, United Kingdom

www.euroclear.com

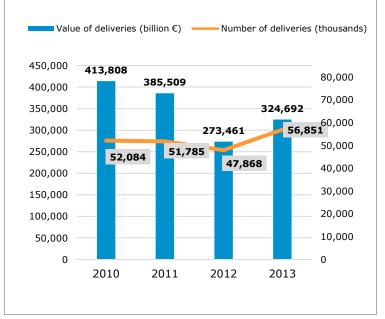
Basic information ☐ Banking license ☑ Designated SSS ☐ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☑ Model 1 (EUR and GBP) ☑ Model 2 (USD) ☐ Model 3







New issues (EUR million)	817,353
Redemptions (EUR million)	675,075
Value of securities held on accounts (EUR million)	5,022,194
Value of deliveries (EUR million)	324,692,318
Number of deliveries (thousands)	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 systems⁶.

1. Basic information and legal framework

	Column title	Description	Responses
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	Eurosystem 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

⁶ See http://www.ecb.int/stats/pdf/securities/sec methodologicalnote tcs.pdf

9	T2S participation	Indicates whether the CSD had signed the TARGET2-Securities Framework Agreement as of 31 December 2012	Yes or No
10	T2S currency	When a CSD has signed the T2S framework agreement, indicates which currency will be accepted for settlement in T2S by that CSD using the 3-letter currency code	EUR: euro DKK: Danish kroner Etc.
11	BIS model	Which of the 3 settlement models identified by the Bank of International Settlement (BIS) does your CSD use?	Model 1: Securities and funds are transferred on a simultaneous, irrevocable and real-time gross settlement (RTGS) basis; Model 2: Securities are settled on a gross basis and cash is settled on a net basis; Model 3: Both securities and cash are exchanged simultaneously on a net basis once a day.
12	BIS model - Comments	Provides further explanations on the use of BIS settlement models, for example when more than one model is used by the CSD.	Free text

2. Corporate governance

	Column title	Description	Responses
13	Ownership category	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)
14	Ownership details	Brief overview of the ownership structure,	Free text

		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

	Column title	Description	Responses
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 ⁷ 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
19	Other	Indicates other types of financial instruments that are accepted by the CSD for deposit and/or settlement	Free text
20	NNA	Indicates whether the CSD act as national numbering agency (NNA)	Yes or No

4. CSD users

	Column title	Description	Responses
21	Domestic participants	Number of direct participants, i.e. direct account holders in a tiered system, and account operators in case of non-tiered systems ⁸ . 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*	Number (no decimals)
22	Non- domestic participants	Same as above, but includes those participants located (incorporated) in a different country from that where the CSD is established*	Number (no decimals)
23	Total number of participants	Sum of domestic and non-domestic participants*	Number (no decimals)
24	Number of securities accounts	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)	Number (no decimals)

 $^{^{8}}$ 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.

25	End investor accounts at CSD level	Indicates whether the CSD provides beneficial owner securities accounts (end investor accounts)	Yes or No
26	End investor accounts - Comments	If the CSD provides beneficial owner accounts, explains the type of services provided by the CSD to beneficial owners (e.g. whether beneficial owner accounts are a legal requirement or an optional choice for investors)	Free text
27	Number of issuers	Number of issuers using the CSD's registration services	Number (no decimals)
28	New issues	Total nominal value of new ISIN codes of securities issued or safe-kept in the CSD from 1 January to 31 December*	Number in million (no decimals), EUR or local currency code ⁹
29	Redemptions	Total nominal value of ISIN codes of securities issued or safe-kept in the CSD that are deleted. New or deleted ISIN codes of stripped securities are not considered*	Number in million (no decimals), EUR or local currency code

5. Transactions

	Column title	Description	Responses
30	Securities held on accounts	Securities held on accounts with the reporting CSD comprise those issued or safe-kept in the reporting 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 CSD8*	Value in million (no decimals), EUR or local currency code
31	Number of deliveries	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).	Number in thousands (no decimals)

_

 $^{^{9}}$ 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



ECSDA aisbl Rond-Point Schuman 6, bte 9 1040 Brussels, Belgium www.ecsda.eu