CSD Factbook







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Introduction

This Factbook contains two sections:

- Section A provides an overview of the CSD landscape in Europe. The analysis, based on 2015 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 at 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

For ease of reading, individual CSDs are described with an acronym or short name, as follows:

Code	Market	Acronym	Full name
AT	Austria	OeKB CSD	OeKB CSD GmbH
ВА	Bosnia-Herzegovina	CR HoV RS	Central Registry of Securities JSC Banja Luka
ВА	Bosnia-Herzegovina	RVP	Registry of Securities
BE	Belgium	EB	Euroclear Bank
BE	Belgium	EBE	Euroclear Belgium
BG	Bulgaria	CDAD	Central Depository AD
СН	Switzerland	SIX SIS	SIX SIS Ltd
CY	Cyprus	CSE	Cyprus Stock Exchange
CZ	Czech Republic	CSD Prague	Central Securities Depository Prague
DE	Germany	CBF	Clearstream Banking AG
DK	Denmark	VP	VP Securities
EE	Estonia	ECSD	Estonian CSD
ES	Spain	Iberclear	Iberclear
FI	Finland	EFI	Euroclear Finland
FR	France	EF	Euroclear France
GR	Greece	ATHEXCSD	Hellenic Central Securities Depository SA
HR	Croatia	SKDD	Central Depository & Clearing Company Inc.
HU	Hungary	KELER	KELER Ltd.
IS	Iceland	NCSD	Nasdaq CSD Iceland
IT	Italy	Monte Titoli	Monte Titoli
LT	Lithuania	CSDL	Central Securities Depository of Lithuania
LU	Luxembourg	CBL	Clearstream Banking Luxembourg
LU	Luxembourg	globeSettle	globeSettle SA
LU	Luxembourg	LuxCSD	LuxCSD SA
LV	Latvia	LCD	Latvian Central Depository
ME	Montenegro	CDA	Central Depository Agency of Montenegro

Code	Market	Acronym	Full name
MK	Macedonia	CSD AD Skopje	Central Securities Depository AD Skopje
MT	Malta	MSE	Malta Stock Exchange
NL	Netherlands	ENL	Euroclear Nederland
NO	Norway	VPS	The Norwegian Central Securities Depository
PL	Poland	KDPW	The Central Securities Depository of Poland
PT	Portugal	Interbolsa	Interbolsa
RO	Romania	DC	Depozitarul Central
RS	Serbia	CR HoV	Central Securities Depository and Clearing House
RU	Russia	NSD	National Settlement Depository
SE	Sweden	ESE	Euroclear Sweden
SI	Slovenia	KDD	Central Securities Clearing Corporation
SK	Slovakia	CDCP SR	Central Securities Depository of the Slovak Republic
TR	Turkey	MKK	Central Securities Depository of Turkey
UA	Ukraine	NDU	National Depository of Ukraine
UK	United Kingdom	EUI	Euroclear UK & Ireland



To view the full ECSDA database online or to download it in Excel, scan this QR code or go to:

http://ecsda.eu/facts/2015database

Section A: The CSD landscape in Europe

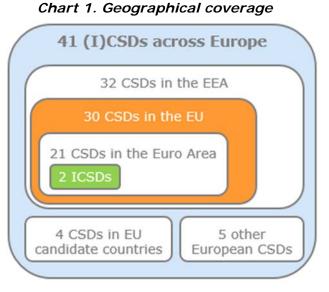
1. Legal framework

1.1 Countries covered

As of 1 January 2016, ECSDA had 41 member organisations, headquartered in 37 countries across Europe (see Chart 1).

ECSDA's membership has remained unchanged since 2014. 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.

Luxembourg hosts four CSDs: Clearstream Banking Luxembourg, LuxCSD, globeSettle, and VPLux, the latter being a wholly-owned subsidiary of VP Securities, the Danish CSD. VPLux is not included in this Factbook because it is not a direct member of ECSDA.



Belgium is home to three CSDs: Euroclear Belgium, Euroclear Bank, and the CSD of the National Bank of Belgium. As of today, ECSDA's membership does not include central banks operating their own securities settlement system, usually for transactions in government securities.

1.2 Applicable standards

All CSDs in Europe are subject to national laws in the country in which they are incorporated. Often, national 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 addition to being regulated as central securities depositories, 7 ECSDA members (OeKB CSD, EB, KELER, CBF, CBL, NSD, SIX SIS) operate with a banking license and therefore are also subject to the relevant banking laws.

Furthermore, the 32 CSDs established in the European Economic Area (EEA) are subject to European regulations, including EU Regulation 909/2014 on central securities depositories and securities settlement, the so-called CSD Regulation or "CSDR" (see Table 2).

With the exception of EBE, ECSD, ATHEXCSD and globeSettle, all CSDs established in a euro area country are eligible securities settlement systems (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 operations¹. The "User addendum" consisting of questions for assessing SSSs and links within the Eurosystem

¹ The list of eligible securities settlement systems is publicly available on the ECB website at: http://www.ecb.europa.eu/paym/coll/eligiblesss/html/index.en.html

framework was last updated in January 2014 and replaces the former ESCB User Standards. Eligible CSDs and eligible CSD links are regularly assessed in terms of their compliance with the Eurosystem framework.

Finally, all European CSDs are also subject to international oversight standards elaborated by the Committee on Payment and Market Infrastructures (CPMI) and the technical committee of the International Organization of Securities Commissions (IOSCO), representing central banks and securities regulators respectively. In April 2012, the CPMI 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.

Table 2. Main European and international rules governing CSD activities

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

1.3 Settlement systems

All ECSDA members but one 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). globeSettle currently only offers free of payment transfers (FoP), whereby a delivery of securities is not linked to a corresponding cash payment (for example, moving securities from one account to another for collateralisation purposes). 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.

Table 3. BIS settlement models

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

The Bank for International Settlements (BIS)² identifies three DvP models, as illustrated in Table 3. All BIS models are in use, and it is common 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 (35 out of 41), either alone (13 CSDs) or in combination with model 2 or 3 (14 and 7 CSDs respectively). Only NSD, the Russian CSD, uses all three models. Following the migration to the TARGET2-Securities platform, some CSDs have stopped - or will stop - using net settlement models, adopting Model 1 on an exclusive basis. This is the case, for instance, of Interbolsa since March 2016. globeSettle currently does not use any of the models because it provides free of payment (FoP) transfers.

² See BIS (1992), "Delivery versus Payment in Securities Settlement Systems", available at: http://www.bis.org/publ/cpss06.pdf

In cases where more than one model is used, Model 1 is typically used for over-the-counter (OTC) transactions. On-exchange transactions usually involve some form of netting and are thus settled according to Model 2 or 3. Five CSDs (CDAD, CSD Prague, NCSD, VPS, CR HoV) settle exclusively with Model 2.

As of 1 January 2016, 20 ECSDA members had signed the T2S framework agreement, which means that they have outsourced or will outsource settlement to a joint technical platform operated by the Eurosystem. TARGET2-Securities is expected to deliver harmonised DvP settlement in central bank money for most European securities. Among the ECSDA members participating in T2S, 16 are established in the euro area.

The four CSDs established outside the euro area (SIX SIS, VP, KELER, DC) are using or will use T2S for the settlement of transactions in euros. As of 2018 however, T2S will settle in Danish Kroner (DKK) as well as in EUR.

In addition to ECSDA members, three other CSDs (the National Bank of Belgium CSD, the Greek central bank CSD BOGS, and VPLux) have also opted for the T2S platform. More details on the T2S project and migration plan can be found at www.t2s.eu.

2. Corporate Governance

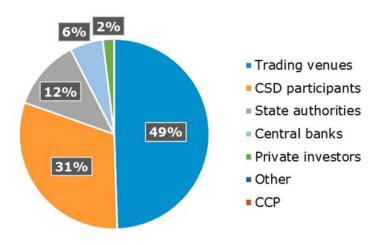
2.1 Ownership models

CSDs display a great diversity of corporate structures and ownership models. One could almost argue that each CSD has a unique ownership structure. In order to aggregate information on ownership models, ECSDA collected data on the proportion of CSD shares owned by the following seven types of entities: state authorities (the Ministry of Finance, for example), central banks, trading venues, central clearing counterparties (CCPs), CSD participants, private investors (including, for example, institutional investors like sovereign funds, pension funds and insurers), and other entities.

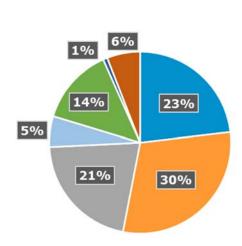
Based on this information, one way to look at CSDs' ownership across Europe is to add the ownership stakes of the different categories of entities for all 41 CSDs put together. This is the approach adopted in Chart 2, which illustrates the proportion of shareholders from different categories in a theoretical CSD, contrasting the prevalent shareholder types in the EU and outside the EU.

Chart 2. Main shareholder types in European CSDs





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 typically have a stronger involvement of the State in CSDs' share capital. In both EU and non-EU CSDs, CSD participants represent a little less than a third of CSD owners.

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 in five 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%), ECSD	15 (37%)
exchange)	(100%), Iberclear (100%), ATHEXCSD	
	(100%), NCSD (100%), CSDL (100%), CBL	
	(100%), globeSettle (100%), LCD (100%),	
	Interbolsa (100%), NSD (100%), CDCP SR	
	(100%), Monte Titoli (98.9%), DC (69%)	
CSD participants (users)	EB (100%), EBE (100%), ENL (100%), EFI	10 (24%)
	(100%), EF (100%), ESE (100%), EUI	
	(100%), SIX SIS (95.7%), VP (68%), CSD AD	
	Skopje (54.9%)	
The State (state authorities	CR HoV (100%), CSE (100%), MSE (100%),	7 (17%)
and/or central banks)	SKDD (86.2%), RVP (75%), KDPW (66.6%),	
	KELER (53.3%)	
Other (banks, private	VPS (71.7% various institutional investors),	3 (7%)
investors, CCPs)	MKK (64.9% Takasbank), OeKB CSD (100%	
	owned by a specialised bank, OeKB)	
No majority shareholder	CDAD (43.7% State, 40% users, 6.6%	6 (15%)
	Exchange, 9.7% others), CR HoV RS (42.5%	
	users, 33% State, 24.5 % Exchange), KDD	
	(36.5% users, 36.2% private investors, 24%	
	State, 3.3% others), NDU (50% State and	
	central bank, 35% users, 10.9% private	
	investors, 4.1% others), LuxCSD (50% central	
	bank, 50% Clearstream), CDA (40% users,	
	35% State, 25% private investors)	

When **trading venues** are shareholders in a CSD, it 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). Among the 41 ECSDA members:

- 13 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, the SIX group, which includes a securities exchange;
- 2 CSDs are primarily owned by CSD participants (VP, CSD AD Skopje);
- 10 CSDs have CSD participants as minority shareholders (42.5% CR HoV RS, 40% CDA, 40% CDAD, 36.5% KDD, 35% NDU, 30.8% VPS, 25.1% DC, 25% RVP, 9.1% SKDD, 5% MKK);
- 21 CSDs do not have CSD participants among their shareholders.

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

- 3 CSDs are fully owned by the State (two of which, 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 the 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).

Three CSDs are primarily owned by **banks or private investors**:

- VPS' main shareholders include various national and international financial institutions, including asset management and insurance companies³;
- MKK is majority-owned by Takasbank-Istanbul Settlement and Custody Bank, which
 offers CCP and other post trade services in the Turkish market;
- In 2015, the CSD activities previously performed by OeKB for the Austrian market were transferred to a new legal entity, OeKB CSD, which is fully owned by OeKB.

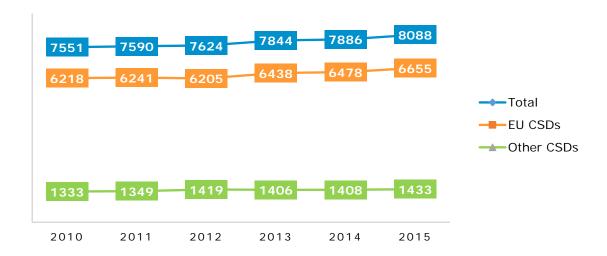
Finally, 6 CSDs have a hybrid ownership structure with **no single majority shareholder type**.

Irrespective of their ownership models, the vast majority of European CSDs (93%) operate as for-profit entities. Only 3 CSDs operate on a not-for-profit basis (CSE, KDPW, CR HoV).

2.2 Employment

As at 31 December 2015, ECSDA members collectively employed more than 8,000 people, among which 82% were employed by CSDs established in the European Union. Overall, this represents an increase of 2.5% compared to 2014, adding to the slightly upward trend in CSD employment figures since 2010.

Chart 3: Total number of CSD employees



³ 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

Excluding the two ICSDs, the average CSD has slightly more than 100 employees. This illustrates that the CSD business, unlike the retail banking business for example, is more IT-intensive than labour-intensive, and many CSDs indeed qualify as small or medium businesses in their respective countries. The range of the figures is broad. While the smallest CSDs are run by fewer than 10 full-time employees, the largest ICSD had more than 3,000 employees.

It is important to note that 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 shared services among the different businesses of the group), the reported figures show the actual number of full-time equivalent staff (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 significant majority of CSDs 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. 80% of CSDs have developed services for investment funds, not only limited to settlement but also including order routing and valuation services. Other instruments often accepted for settlement include Depository Receipts, eurobonds, cooperative share units, asset backed securities, other structured products and investment certificates.

Chart 4. Financial instruments accepted for settlement in European CSDs

3.2 National numbering agencies

Most European CSDs (32 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 markets and in the issuance process in particular. In Austria, the function of NNA remains with OeKB and has not been transferred to the new legal entity, OeKB CSD, established in 2015.

3.3 Legal Entity Identifier (LEI)

5 CSDs (CSD Prague, LuxCSD, KDPW, NSD, CDCP SR) are also authorised to allocate Legal Entity Identifiers (LEIs) 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 January 2016, KDD will also be issuing LEIs for the Slovenian market. More details can be found on the website of the Global LEI Foundation at: www.gleif.org.

4.1 Participants

CSD participants are typically wholesale financial firms. If we exclude the two ICSDs and globeSettle, European CSDs had on average around 105 participants as of end 2015, a relatively stable but slightly declining number compared to 2013 and 2014. The number of participants ranges from 20 or less (10 CSDs) to 250 or more (4 CSDs, in addition to the two ICSDs). Within the EU, the domestic CSD with the highest number of participants is CBF with 288. The two ICSDs have more than 1,400 participants each.

Chart 5. Proportion of non-domestic participants per CSD

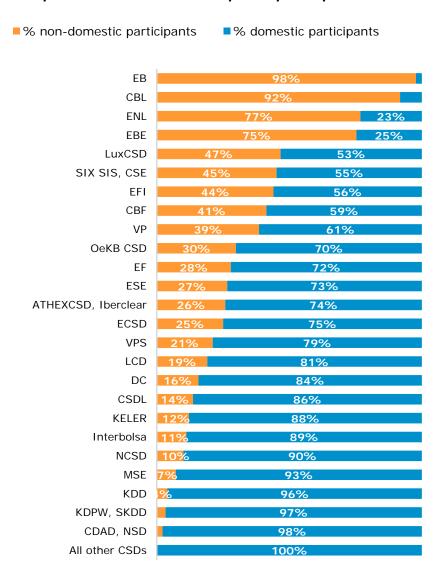


Chart 5 reveals important differences regarding the balance between domestic and non-domestic participants. On average, leaving the ICSDs aside (since they are by nature not operating in a domestic environment), European CSDs had 19% of non-domestic participants in 2015, a stable proportion compared to 2014. Interestingly, 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.

The CSDs with the highest proportion of foreign participants in 2015 (excluding the ICSDs) were ENL (77%) and EBE (75%). On the other hand, fifteen ECSDA members had fewer than 10% of foreign participants, and 6 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 usually 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.

54% of European CSDs offer a special type of securities account for end investors whereby the CSD has direct access to information on the identity of end investors. These 22 CSDs operate in 21 countries, of which 9 allow CSD participants to use omnibus accounts, and 12 impose the use of end investor accounts by CSD participants, at least for domestic investors and/or for certain types of instruments (e.g. shares). In the remaining markets (46% of ECSDA members), there is no special type of account for end investor holdings. CSDs typically allow their users to segregate client assets in a flexible way, but they do not have direct access to information on the identity of end investors, which is kept by the relevant intermediary(ies) with which the investor has a contractual relationship. A <u>special report</u> published by ECSDA in October 2015 describes account segregation practices at CSDs in greater detail.

The total number of securities accounts held at European CSDs in 2015 was around 83 million. There are however great variations at the level of individual CSDs, depending on whether end investor accounts are commonly used (see Tables 5a and 5b).

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

CSD	Number of securities accounts
MKK (Turkey)	45,620,850
DC (Romania)	8,470,553
CR HoV (Serbia)	8,443,231
VP (Denmark)	3,305,228
ESE (Sweden)	3,200,000

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

CSD	Number of securities accounts
OeKB CSD (Austria)	713
Interbolsa (Portugal)	708
EBE (Belgium)	576
Iberclear (Spain)	339
LuxCSD (Luxembourg)	19

^{*}globeSettle is not included in the Table.

4.3 New issues and redemptions

Until 2013, ECSDA collected data on newly issued and redeemed securities based on the nominal value of the securities. Nominal values are however not always available or meaningful for financial instruments like equities. As a result, since 2014, ECSDA collects information on the number of new issues and redemptions, i.e. the number of new ISIN codes entered into or deleted from CSD systems, irrespective of the nominal or market value of the securities.

From January to December 2015, ECSDA members collectively accepted more than 900,000 new ISINs, whereas more than 1 million ISINs were deleted from CSD systems as a result of redemptions. If we exclude the ICSDs, the number of new issues actually exceeded the number of redemptions: 605,000 versus 545,000 respectively. This translates into an average number of new issues per CSD of around 16,000 - and 14,000 for redemptions.

37 CSDs also provided data on issuers, i.e. the entities responsible for issuing the securities recorded in CSD systems. As of 31 December 2015, the average European CSD held securities issued by around 1,400 issuers. Once more there are significant differences across markets, with 3 CSDs holding securities on behalf of fewer than 100 issuers, and four CSDs holding securities on behalf of more than 3,000 issuers (ICSDs excluded).

5. Securities transactions

5.1 Securities held in CSDs

From 2014 to 2015, the total value of all securities held at ECSDA member CSDs increased by 4.2%, adding to the upward trend since 2010 (see Chart 7). Over the past five years, more than EUR 9 trillion worth of securities were added in accounts held at European CSDs. Like in 2014, the increase in the value of securities on accounts was slightly more pronounced in EU CSDs than in those ESCDA members located outside the EU.

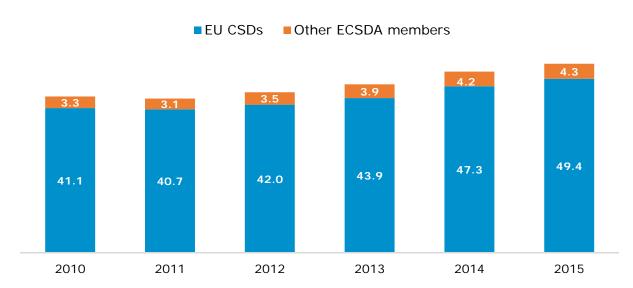


Chart 7: Total value of securities held on CSD accounts (in EUR trillion)

European CSDs collectively held client securities worth around **EUR 53.7 trillion**. EU CSDs represent more than 92% of this amount, with EUR 49.4 trillion.

Whereas in 11 CSDs, the total value of securities held on accounts is less than EUR 20 billion, 5 of the largest EU (I)CSDs represent 71% of the total, with more than EUR 5.5 trillion each. Excluding the ICSDs, the average EU CSD holds EUR 1.1 trillion worth of assets.

5.2 Delivery instructions

In 2015, European CSDs collectively processed around **644 million** delivery instructions. More than 1/4 of these deliveries (27%) were processed by MKK, the Turkish CSD, which maintains more than 45 million securities accounts, in what is by far the largest European market operating with end investor accounts. If we subtract MKK from the total, deliveries at European CSDs amounted to **473 million** (see Chart 8).

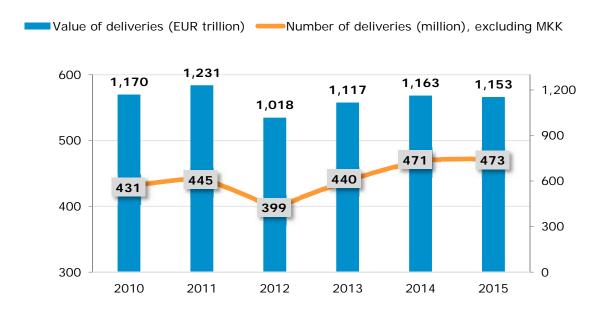
9 CSDs processed fewer than 50,000 deliveries, whereas 5 CSDs processed more than 50 million deliveries. Leaving MKK aside, this translates into an average annual settlement volume per CSD of 11 million instructions or around 46,000 instructions per day of operation⁴.

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⁴ Assuming an average of 256 days of operation per year.

In terms of value, delivery instructions processed annually by European CSDs represent **EUR 1.15 quadrillion**, down by a little less than 1% compared to 2014. Three CSDs account for 70% of this amount: EB, EF, and EUI. Overall, 7 CSDs processed more than EUR 50 trillion worth of deliveries in 2015, versus a value of less than EUR 5 billion in the 9 smallest CSDs.

Chart 8: Delivery instructions processed by ECSDA members



Looking at the 29 EU CSDs only⁵, 378 million securities deliveries were processed in 2015, worth EUR 1.12 quadrillion. Excluding the ICSDs, this translates into an average of EUR 22 trillion worth of deliveries per CSD.

Lastly, based on these figures, the average size of a single delivery instruction was around EUR 2.4 million (excluding MKK).

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⁵ In 2015, globeSettle did not yet have transaction data to report.

Section B: Individual factsheets

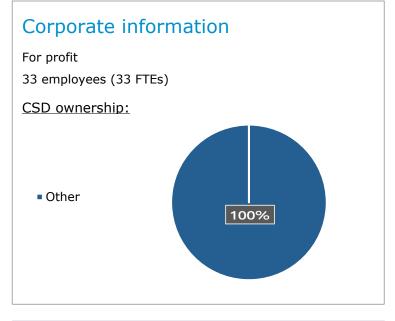
This section of the report contains a 1-page factsheet on each ECSDA member organisation. Unless otherwise specified, all information provided is valid as at 31 December 2015.



OeKB CSD

OeKB CSD GmbH, Strauchgasse 3, 1011 Vienna, Austria www.oekb-csd.at

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



Users Securities accounts: 713 End investor accounts at CSD: No End investor accounts mandatory: No Total participants: 94 Domestic Non-domestic 70% 30%

New issues 1,408 Redemptions 1,358 Value of securities held on accounts (EUR million) 523,169 Value of deliveries (EUR million) 177,333 Number of deliveries (thousands) 1,185

Securities transactions 2015

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

50 €	21	237	221	219	231		2.0
.00 € —						177	1.8 1.6
						1//	1.4
50 € - 1	.46	1.38		1.05	1.32		1.2
			1.14	1.25		1.19	1.0
00 € —							0.8
							0.6
50 € —						_	0.4
							0.2
0€							0.0
20	010	2011	2012	2013	2014	2015	

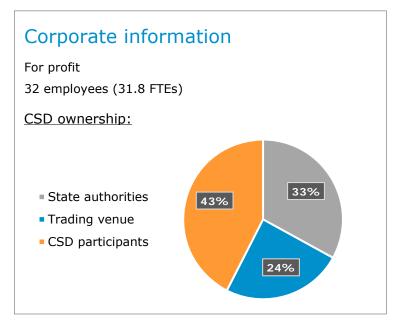


Central Registry of Securities JSC Banja Luka (CR HoV RS)

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 & block transactions) ✓ Model 2 (Exchange transactions) ☐ Model 3



Users

Securities accounts: 1,254,555 End investor accounts at CSD: Yes

Total participants: 11

■ Domestic ■ Non-domestic

End investor accounts mandatory: Yes

100%

Services

Financial instruments accepted for deposit and/or settlement:

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

Other services:

☑ NNA ☐ LEI

New issues	26
Redemptions	57
Value of securities held on accounts (EUR million)	6,569
Value of deliveries (EUR million)	74
Number of deliveries (thousands)	19

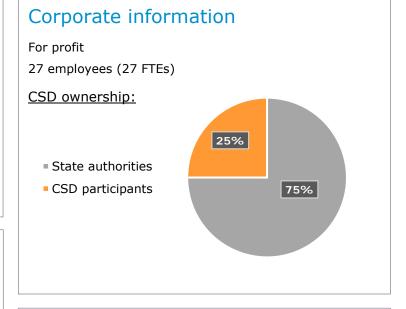




Registry of Securities (RVP)

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 (Exchange transactions) □ Model 3



Users

Securities accounts: 674,373 End investor accounts at CSD: Yes End investor accounts mandatory: Yes

Total participants: 13

■ Domestic ■ Non-domestic

100%

Services

Financial instruments accepted for deposit and/or settlement:

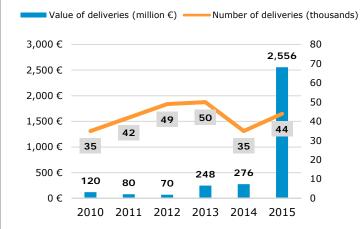
- **☑** Equities
- ☐ ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☐ Warrants and rights
- ☐ Emission rights
- ☐ Other: -

Other services:

☑ NNA ☐ LEI

Securities transactions 2015

New issues	48
Redemptions	56
Value of securities held on accounts (EUR million)	6,313
Value of deliveries (EUR million)	2,556
Number of deliveries (thousands)	44



Note: The large increase in the value of delivery instructions from 2014 to 2015 is due to a significant transfer of shares (approximately BAM 4 billion) from the ministries to the Federation which took place during 2015.



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: 24,469 End investor accounts at CSD: No End investor accounts mandatory: No Total participants: 1,602 ■ Domestic ■ Non-domestic 98%

Services

Financial instruments accepted for deposit and/or settlement:

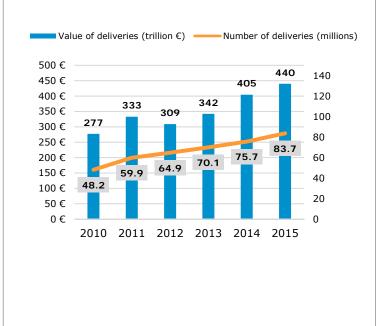
- **☑** Equities
- **☑** FTFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- ☐ Emission rights
- ☑ Other: Depositary Receipts

Other services:

✓ NNA ☐ LEI



New issues	295,798
Redemptions	571,957
Value of securities held on accounts (EUR million)	12,273,202
Value of deliveries (EUR million)	439,953,613
Number of deliveries (thousands)	83,725





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

Users

Securities accounts: 576

End investor accounts at CSD: No End investor accounts mandatory: No

Total participants: 77

■ Domestic ■ Non-domestic

25% 75%

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

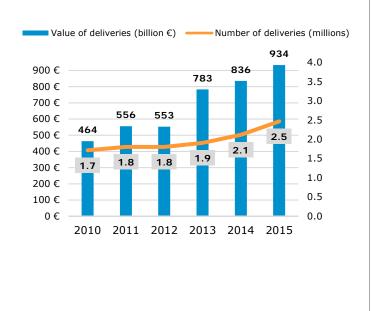
☑ Other: VVPR strips

Other services:

☐ LEI □ NNA



New issues	3,316
Redemptions	3,211
Value of securities held on accounts (EUR million)	271,106
Value of deliveries (EUR million)	933,545
Number of deliveries (thousands)	2,467





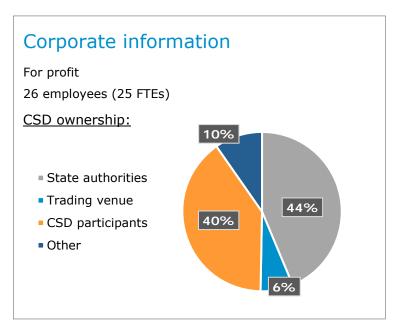
Central Depository AD (CDAD)

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

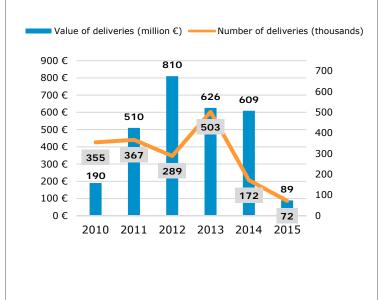
Basic information □ Banking license ☑ Designated SSS □ Eurosystem eligible SSS □ T2S BIS settlement model: □ Model 1 ☑ Model 2 □ Model 3



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: Compensatory Instruments Other services: ☐ LEI ☑ NNA



New issues	36
Redemptions	1,612
Value of securities held on accounts (EUR million)	33,213
Value of deliveries (EUR million)	89
Number of deliveries (thousands)	72





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





55% 45%

■ Domestic ■ Non-domestic

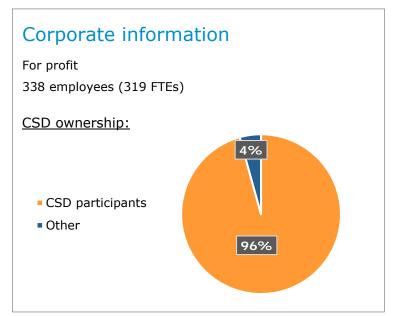
Services

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: -

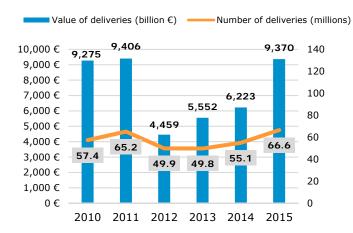
Other services:

☐ LEI ☑ NNA



Securities transactions 2015

New issues	232,618
Redemptions	185,259
Value of securities held on accounts (EUR million)	2,936,605
Value of deliveries (EUR million)	9,369,780
Number of deliveries (thousands)	66,619



Note: From 2014 to 2015, there was a notable increase in the value of securities held at SIX SIS in EUR. This increase is mostly due to exchange rate volatility. Indeed, the figures in CHF actually reveal a slight decrease (from CHF 3.2 trillion to CHF 3.1 trillion).

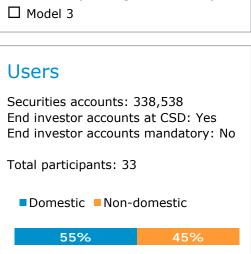


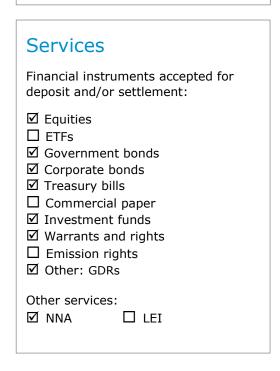
Cyprus Stock Exchange (CSE)

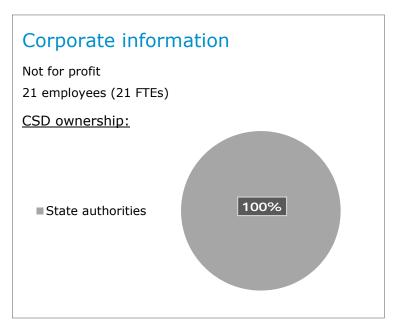
Cyprus Stock Exchange, 71-73 Lordou Vironos Avenue, 1096 Nicosia, Cyprus

www.cse.com.cy

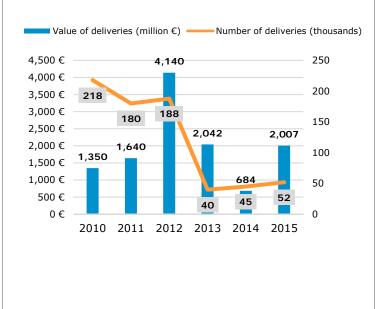
Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☑ Model 1 (OTC transactions) ☑ Model 2 (Exchange transactions) ☐ Model 3







New issues	59
Redemptions	63
Value of securities held on accounts (EUR million)	6,896
Value of deliveries (EUR million)	2,007
Number of deliveries (thousands)	52





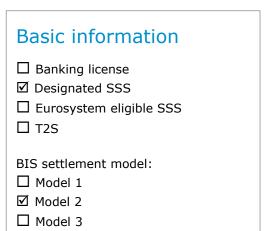
Central Securities Depository Prague (CSD Prague)

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

Corporate information

www.centralnidepozitar.cz

For profit





Users

Securities accounts: 1,499,588 End investor accounts at CSD: Yes End investor accounts mandatory: No

Total participants: 28

■ Domestic ■ Non-domestic

71%

29%

Services

Financial instruments accepted for deposit and/or settlement:

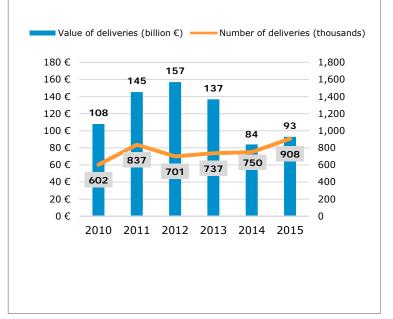
- ☑ Equities
- ☐ ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☐ Treasury bills
- ☐ Commercial paper
- ☐ Investment funds
- ☑ Warrants and rights
- ☐ Emission rights
- ☐ Other: -

Other services:

☑ NNA

✓ LEI

New issues	192
Redemptions	198
Value of securities held on accounts (EUR million)	76,146
Value of deliveries (EUR million)	92,947
Number of deliveries (thousands)	908



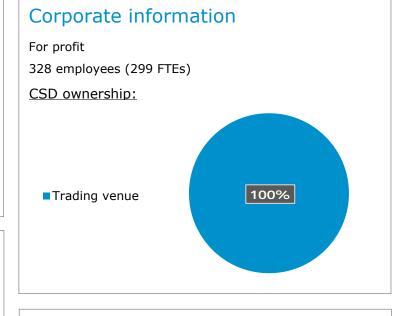
clearstream GROUP

Clearstream Banking Frankfurt (CBF)

Clearstream Banking AG, Mergenthalerallee 61, 65760 Eschborn, Germany

www.clearstream.com

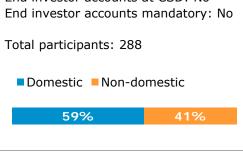
Basic information ☑ Banking license ☑ Designated SSS ${\ensuremath{\,\overline{\square}}}$ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 ☐ Model 2



Users

☐ Model 3

Securities accounts: 10,168 End investor accounts at CSD: No



Services

Financial instruments accepted for deposit and/or settlement:

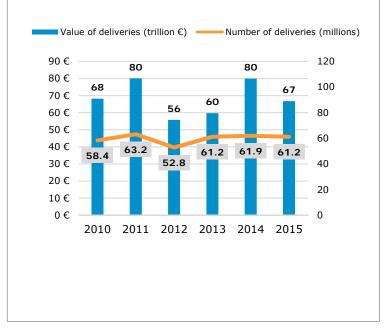
- ☑ Equities
- **☑** ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- ☑ Emission rights
- ☐ Other: -

Other services:

 \square NNA

☐ IFT

New issues	4,728
Redemptions	3,824
Value of securities held on accounts (EUR million)	7,806,765
Value of deliveries (EUR million)	66,724,515
Number of deliveries (thousands)	61,175





VP SECURITIES VP Securities (VP)

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 (most commonly used)

Users

Securities accounts: 3,305,228 End investor accounts at CSD: Yes End investor accounts mandatory: No

Total participants: 179

■ Domestic ■ Non-domestic

61%

Services

Financial instruments accepted for deposit and/or settlement:

- ☑ Equities
- **☑** ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- ☐ Emission rights
- ☑ Other: Non-tradeable certificates issued by special-purpose UCITS

Other services:

☑ NNA

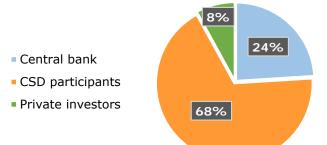
☐ LEI

Corporate information

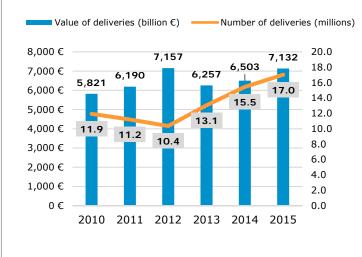
For profit

175 employees (172.5 FTEs)

CSD ownership:

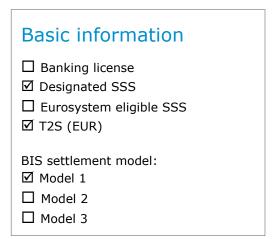


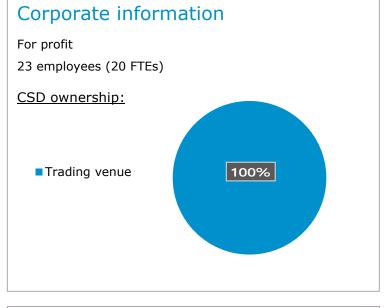
New issues	662
Redemptions	584
Value of securities held on accounts (EUR million)	1,036,381
Value of deliveries (EUR million)	7,132,295
Number of deliveries (thousands)	17,037



NASDAQ OMX Estonian CSD (ECSD)

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





Users

Securities accounts: 108,029 End investor accounts at CSD: Yes End investor accounts mandatory: No

Total participants: 16

■Domestic ■Non-domestic

75%

25%

Services

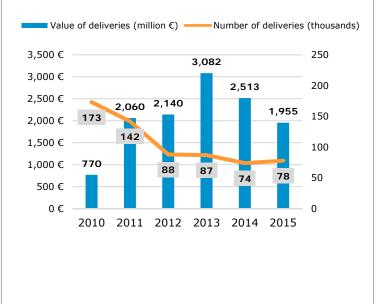
Financial instruments accepted for deposit and/or settlement:

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

Other services:

☑ NNA ☐ LEI

New issues	515
Redemptions	544
Value of securities held on accounts (EUR million)	8,139
Value of deliveries (EUR million)	1,955
Number of deliveries (thousands)	78



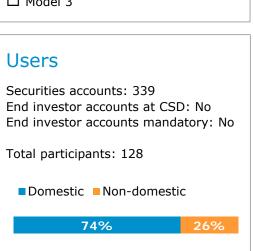


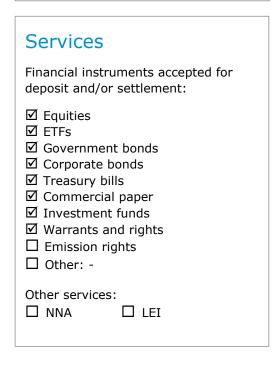
Iberclear

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

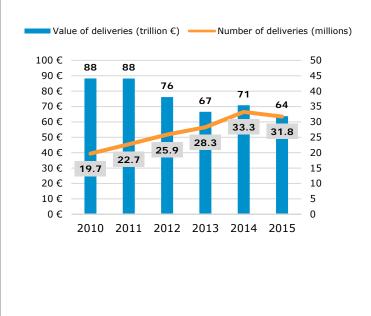
Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 (CADE Platform) ☑ Model 2 (SCLV Platform) ☐ Model 3







New issues	10,725
Redemptions	10,289
Value of securities held on accounts (EUR million)	2,228,493
Value of deliveries (EUR million)	63,712,213
Number of deliveries (thousands)	31,761





Euroclear Finland

Euroclear Finland Oy, Urho Kekkosen katu 5 C, 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: 1,369,020 End investor accounts at CSD: Yes End investor accounts mandatory: Yes Total participants: 25 ■ Domestic ■ Non-domestic 56% 44%

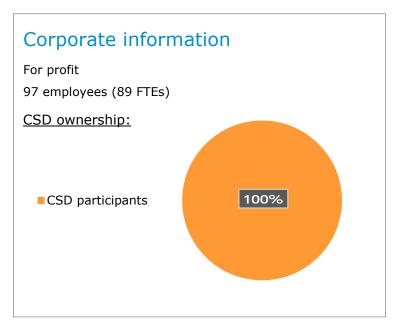
Services

Financial instruments accepted for deposit and/or settlement:

- ☑ Equities
- ☑ ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- ☐ Emission rights
- ☑ Other: Finnish Depositary Receipts (FDR)

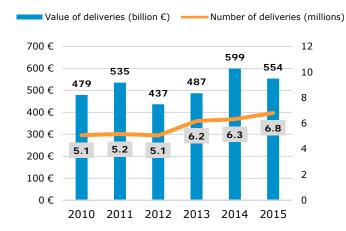
Other services:

☐ LEI ☑ NNA



Securities transactions 2015

New issues	9,031
Redemptions	7,572
Value of securities held on accounts (EUR million)	309,298
Value of deliveries (EUR million)	553,681
Number of deliveries (thousands)	6,817



Note: The increase in the number of new issues and redemptions from 2014 to 2015 is mainly due to significant growth in the warrants market.



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: 1,087

End investor accounts at CSD: No End investor accounts mandatory: No

Total participants: 147

■ Domestic ■ Non-domestic

72%

28%

Services

Financial instruments accepted for deposit and/or settlement:

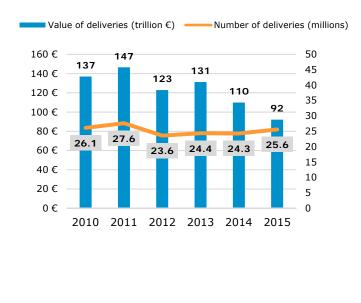
- ☑ Equities
- ☑ ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- \square Emission rights
- ☐ Other: -

Other services:

✓ NNA



New issues	184,000
Redemptions	185,060
Value of securities held on accounts (EUR million)	6,073,838
Value of deliveries (EUR million)	92,117,739
Number of deliveries (thousands)	25,612

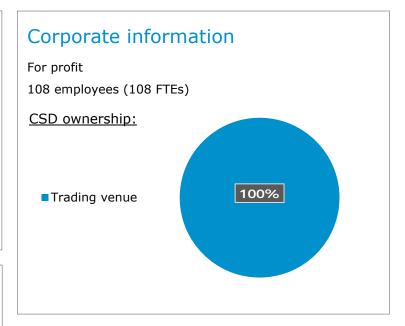




ATHEXCSD

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

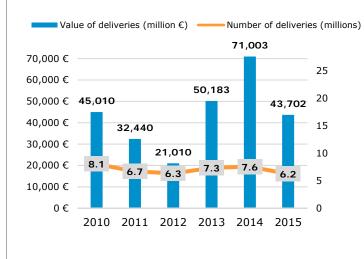
Basic information ☐ Banking license ☑ Designated SSS ☐ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☑ Model 1 (beneficiary account level) ☑ Model 2 ☐ Model 3



Users Securities accounts: 1,694,782 End investor accounts at CSD: Yes End investor accounts mandatory: Yes Total participants: 62 Domestic Non-domestic

Securities transactions 2015

New issues	0
Redemptions	1,000
Value of securities held on accounts (EUR million)	47,310
Value of deliveries (EUR million)	43,702
Number of deliveries (thousands)	6,242



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



Central Depository & Clearing Company Inc. (SKDD)

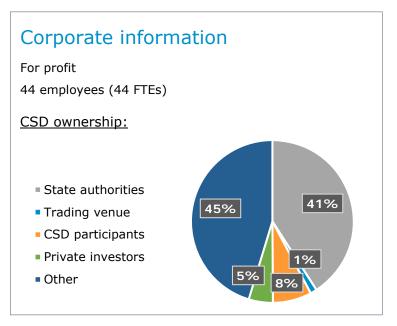
Središnje klirinško depozitarno društvo d.d., Heinzelova 62a, 10000 Zagreb, Croatia

www.skdd.hr

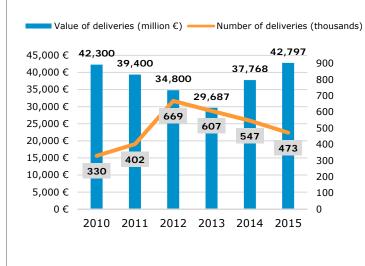
Basic information ☐ Banking license ☑ Designated SSS ☐ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☑ Model 1 ("trade-for-trade" service) ☐ Model 2 ☑ Model 3 (contractual service)

Users Securities accounts: 885,843 End investor accounts at CSD: Yes End investor accounts mandatory: Yes Total participants: 59 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: Croatian government rights, Certificates Other services: ☑ NNA ☐ LEI



New issues	190
Redemptions	195
Value of securities held on accounts (EUR million)	50,271
Value of deliveries (EUR million)	42,797
Number of deliveries (thousands)	473





KELER

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

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



Users

Securities accounts: 4,530 End investor accounts at CSD: No End investor accounts mandatory: No

Total participants: 149

■ Domestic ■ Non-domestic

88%

Securities transactions 2015

New issues	40,000
Redemptions	38,000
Value of securities held on accounts (EUR million)	118,483
Value of deliveries (EUR million)	702,200
Number of deliveries (thousands)	666

2,000

1,800

1,600

1,400

1,200

1,000

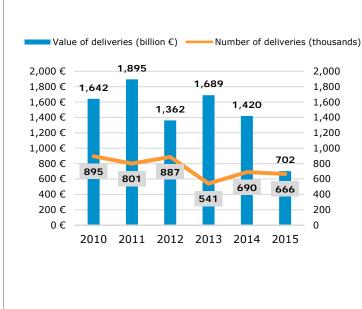
800

600

400

200

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Services

Financial instruments accepted for deposit and/or settlement:

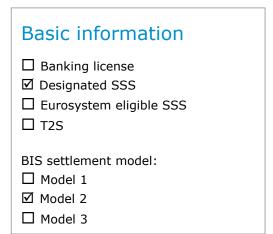
- ☑ Equities
- ☑ ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☐ Warrants and rights
- ☑ Emission rights
- ☑ Other: Futures, Options, Mortgage Bonds, Capital Bill

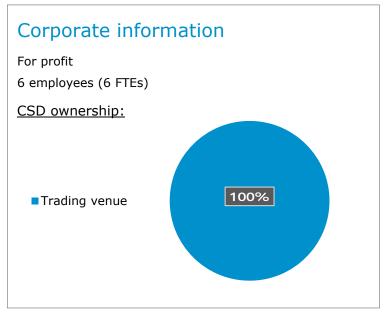
Other services:

☑ NNA ☐ LEI

NASDAQ OMX Nasdaq CSD Iceland (NCSD)

Nasdaq verðbréfamiðstöð hf., Laugavegur 182, 105 Reykjavik, Iceland www.vbsi.is



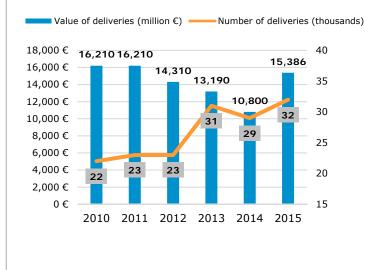


Users

Securities accounts: 51,335 End investor accounts at CSD: Yes End investor accounts mandatory: No Total participants: 20 Domestic Non-domestic 90% 10%

Securities transactions 2015

New issues	111
Redemptions	48
Value of securities held on accounts (EUR million)	28,339
Value of deliveries (EUR million)	15,386
Number of deliveries (thousands)	32



Services

Financial instruments accepted for deposit and/or settlement:

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

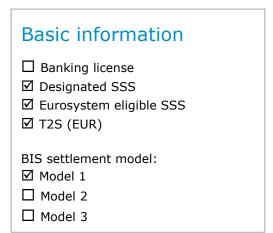
Other services:

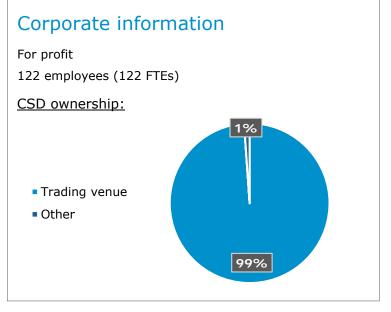
☑ NNA ☐ LEI



Monte Titoli

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





Users

Securities accounts: 923

End investor accounts at CSD: No End investor accounts mandatory: No

Total participants: 183

■Domestic ■Non-domestic

91% 9<mark>%</mark>

Services

Financial instruments accepted for deposit and/or settlement:

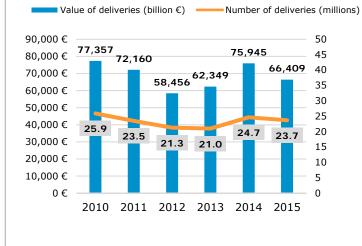
- ☑ Equities
- **☑** ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- ☐ Emission rights
- ☑ Other: Cooperative shares (issued by Italian cooperative banks) and shares with increased voting rights

Other services:

□ NNA □ LEI

6

New issues	9,000
Redemptions	19,000
Value of securities held on accounts (EUR million)	3,305,694
Value of deliveries (EUR million)	66,409,082
Number of deliveries (thousands)	23,718



NASDAQ OMX

Central Securities Depository of Lithuania (CSDL)

Lietuvos centrinis vertybinių popierių depozitoriumas, Konstitucijos avenue 29, 08105 Vilnius, Lithuania www.csdl.lt

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



Users

Securities accounts: 1,096

End investor accounts at CSD: No End investor accounts mandatory: No

Total participants: 22

■ Domestic ■ Non-domestic

86% 14%

Services

Financial instruments accepted for deposit and/or settlement:

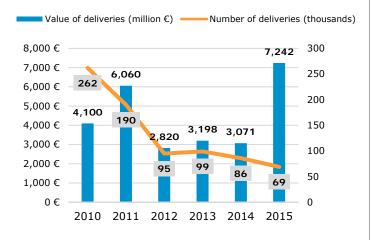
- **☑** Equities
- **☑** ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☐ Emission rights
- ☐ Other: -

Other services:

☑ NNA ☐ LEI

Securities transactions 2015

New issues	351
Redemptions	140
Value of securities held on accounts (EUR million)	10,314
Value of deliveries (EUR million)	7,242
Number of deliveries (thousands)	69



Note: The increase in the value of delivery instructions from 2014 to 2015 mainly relates to the euro changeover on 1 January 2015.

clearstream 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



Users

Securities accounts: 9,914 End investor accounts at CSD: No End investor accounts mandatory: No

Total participants: 1,421

■ Domestic ■ Non-domestic

8% 92%

Services

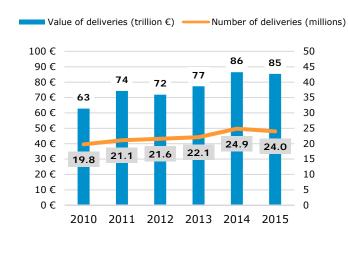
Financial instruments accepted for deposit and/or settlement:

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

Other services:

☑ NNA ☐ LEI

New issues	91,000
Redemptions	22,000
Value of securities held on accounts (EUR million)	5,979,505
Value of deliveries (EUR million)	85,383,943
Number of deliveries (thousands)	24,014





globeSettle

globeSettle S.A., 16 Boulevard d'Avranches, 1160 Luxembourg www.lseq.com

Basic information ☐ Banking license ☑ Designated SSS ☐ Eurosystem eligible SSS ☐ T2S BIS settlement model: n/a Currently, globeSettle only offers free of payment (FoP) transfers



Users

Securities accounts: n/a

End investor accounts at CSD: No End investor accounts mandatory: No

Total participant: 1 (non-domestic)

Securities transactions 2015

Not applicable

Services

Financial instruments accepted for deposit and/or settlement:

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

Other services:

□ NNA □ LEI



LuxCSD SA, 42 Avenue JF Kennedy, 1855 Luxembourg www.luxcsd.com

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

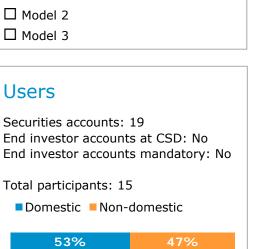
Users

Securities accounts: 19

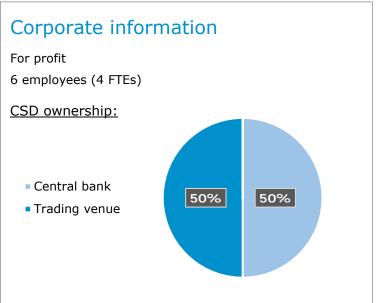
Total participants: 15

53%

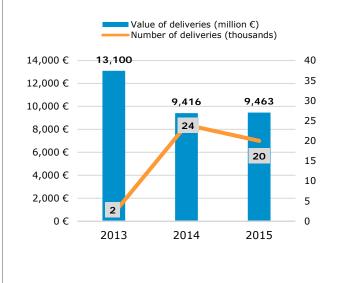
■ Domestic ■ Non-domestic



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 -Other services: ☑ LEI □ NNA



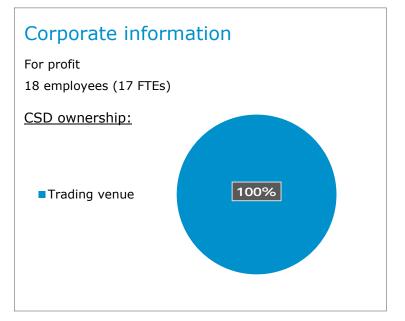
New issues	10,000
Redemptions	11,000
Value of securities held on accounts (EUR million)	14,404
Value of deliveries (EUR million)	9,463
Number of deliveries (thousands)	20



NASDAQ OMX Latvian Central Depository (LCD)

Latvijas Centrālais depozitārijs, Valnu iela 1, Riga 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

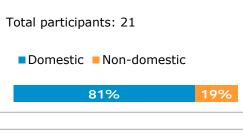


Users

☑ Model 3

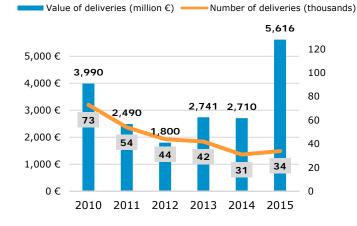
Securities accounts: 895

End investor accounts at CSD: No End investor accounts mandatory: No



Securities transactions 2015

New issues	51
Redemptions	36
Value of securities held on accounts (EUR million)	4,427
Value of deliveries (EUR million)	5,616
Number of deliveries (thousands)	34



Note: The large increase in the value of deliveries in 2015 is due to the growth of international operations and a marked increased in bond deliveries reflecting an increasingly active secondary market for debt securities.

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



☐ Model 3

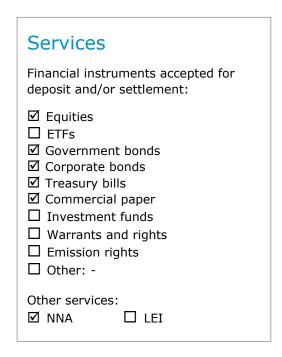
Central Depository Agency of Montenegro (CDA)

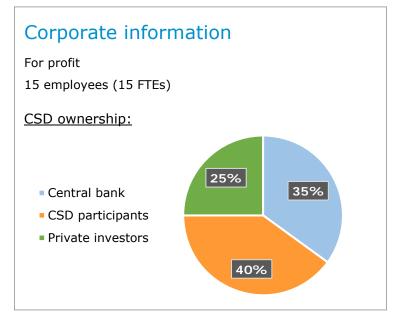
Centralna Depozitarna Agencija A.D. Podgorica, Novaka Miloseva bb, 81000 Podgorica, Montenegro

www.cda.me

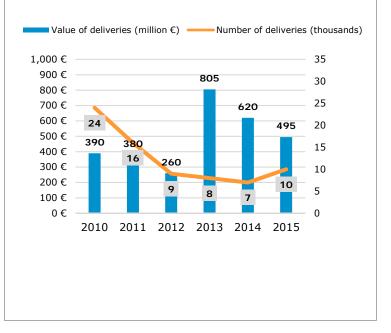
Basic information ☐ Banking license ☐ Designated SSS ☐ Eurosystem eligible SSS ☐ T2S BIS settlement model: ☑ Model 1 (default model) ☑ Model 2 (under certain conditions)

Users Securities accounts: 472,180 End investor accounts at CSD: Yes End investor accounts mandatory: Yes Total participants: 14 Domestic Non-domestic





New issues	10
Redemptions	19
Value of securities held on accounts (EUR million)	5,214
Value of deliveries (EUR million)	495
Number of deliveries (thousands)	10

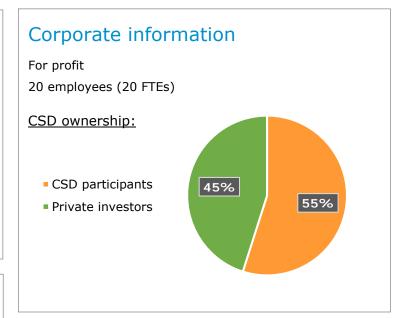




Central Securities Depository AD Skopje (CSD AD Skopje)

Centralen depozitar za hartii od vrednost AD Skopje, bul. Kuzman Josifovski Pitu 1, 1000 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: 267,052 End investor accounts at CSD: Yes End investor accounts mandatory: Yes

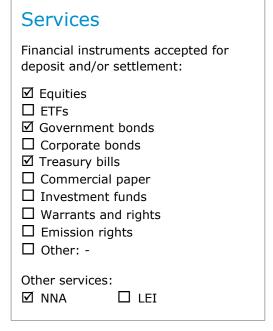
Total participants: 10

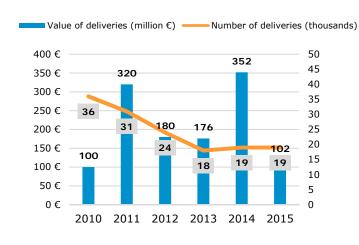
■ Domestic ■ Non-domestic

100%

d investor accounts at CSD: Yes Securities transactions 2015

New issues	99
Redemptions	103
Value of securities held on accounts (EUR million)	5,007
Value of deliveries (EUR million)	102
Number of deliveries (thousands)	19





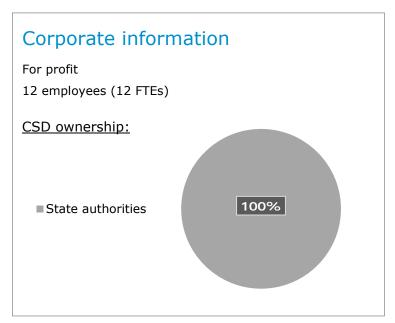
Note: There was an unusually large transaction in 2014 which created a spike in the data.



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 □ Model 2 □ Model 3



Users Securities accounts: 285,721 End investor accounts at CSD: Yes End investor accounts mandatory: Yes Total participants: 14 Domestic Non-domestic 93% 7%

New issues 99 Redemptions 89 Value of securities held on accounts (EUR million) 12,959 Value of deliveries (EUR million) 2,540 Number of deliveries (thousands) 40

Securities transactions 2015

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

Value of deliveries (million €) ——Number of deliveries	(thousands)
3,000 €	
2,500 €	50
2,011	40
1,570 1,600 40 1,500 € 1,400 31	30
1,000 € - 24	20
500 € 19 17 14	10
0 €	0
2010 2011 2012 2013 2014 2015	



Euroclear Nederland

Euroclear Nederland, Herengracht 459-469, 1017 BS Amsterdam, the Netherlands

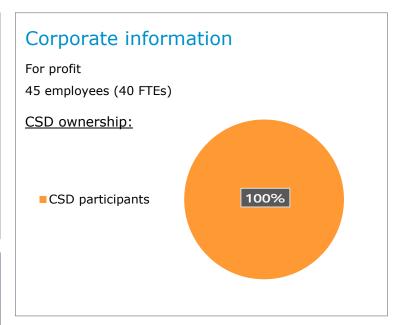
www.euroclear.com

Post-trade made easy

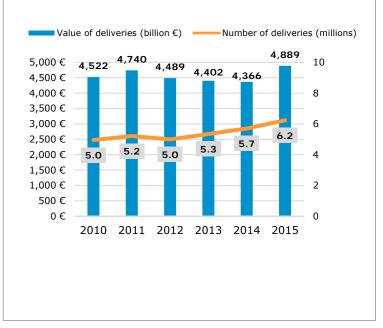
Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 ☐ Model 2 ☐ Model 3

Users Securities accounts: 788 End investor accounts at CSD: No End investor accounts mandatory: No Total participants: 69 Domestic Non-domestic 77%

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



New issues	46,086
Redemptions	44,026
Value of securities held on accounts (EUR million)	993,406
Value of deliveries (EUR million)	4,889,184
Number of deliveries (thousands)	6,242





The Norwegian Central Securities Depository (VPS)

Verdipapirsentralen ASA, Fred. Olsens gate 1, 0051 Oslo, Norway www.vps.no

Corporate information

116 employees (115 FTEs)

For profit

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

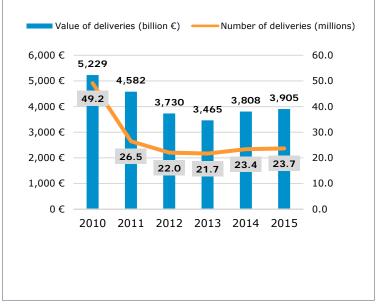


Users Securities accounts: 1,287,925 End investor accounts at CSD: Yes End investor accounts mandatory: Yes Total participants: 38 Domestic Non-domestic

New issues	1,631
Redemptions	1,657
Value of securities held on accounts (EUR million)	520,634
Value of deliveries (EUR million)	3,905,024
Number of deliveries (thousands)	23,682

31%

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





Central Securities Depository of Poland (KDPW)

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

BIS settlement model:

- ☑ Model 1
- ☑ Model 2 (batch cycle)
- ☐ Model 3

Users

Securities accounts: 37,525 End investor accounts at CSD: No End investor accounts mandatory: No

Total participants: 61

■ Domestic ■ Non-domestic

97% 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: Investment & other certificates, international bonds

Other services:

☑ NNA

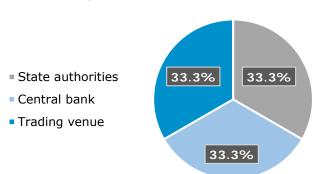
☑ LEI

Corporate information

Not for profit

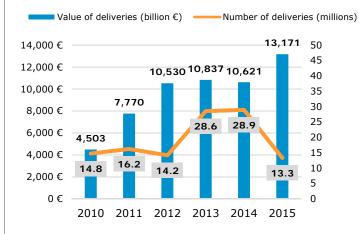
188 employees (185.8 FTEs)

CSD ownership:



Securities transactions 2015

New issues	893
Redemptions	891
Value of securities held on accounts (EUR million)	271,686
Value of deliveries (EUR million)	13,170,804
Number of deliveries (thousands)	13,325



Note: The marked decrease in the number of deliveries in 2015 is mainly due to the launch of a netting service by KDPW CCP.

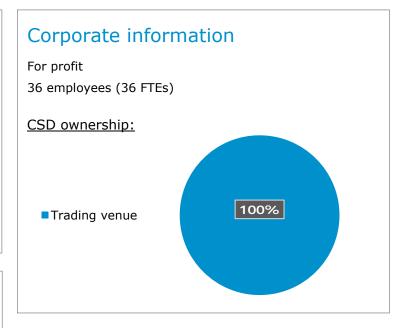


Interbolsa

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 (Exchange transactions) ☐ Model 3



Users

Securities accounts: 708

End investor accounts at CSD: No End investor accounts mandatory: No

Total participants: 36

■Domestic ■Non-domestic

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



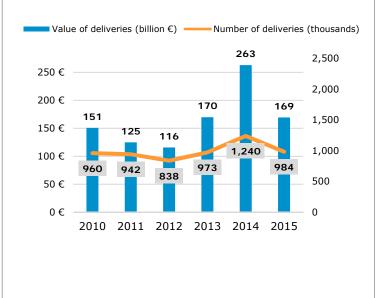
Financial instruments accepted for deposit and/or settlement:

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

Other services:

☑ NNA ☐ LEI

New issues	4,944
Redemptions	5,177
Value of securities held on accounts (EUR million)	566,443
Value of deliveries (EUR million)	169,441
Number of deliveries (thousands)	984



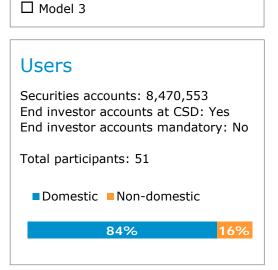


Depozitarul Central

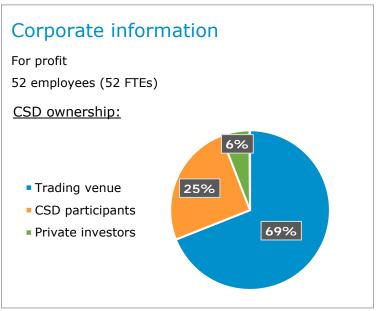
Depozitarul Central SA, IBC Modern Building, 34 - 36 Carol I Boulevard, Floors 8, Bucharest 020922, Romania

www.roclear.eu

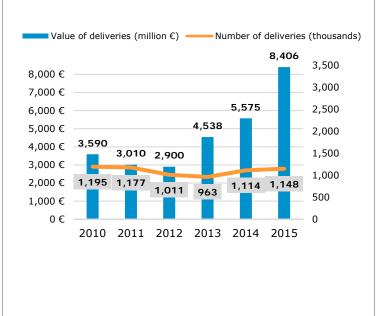
Basic information □ Banking license ☑ Designated SSS □ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 (OTC transactions) ☑ Model 2 (Exchange transactions)



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



New issues	87
Redemptions	654
Value of securities held on accounts (EUR million)	20,901
Value of deliveries (EUR million)	8,406
Number of deliveries (thousands)	1,148





Central Securities Depository and Clearing House (CR HoV)

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

Corporate information

Not for profit

35 employees (35 FTEs)

www.crhov.rs

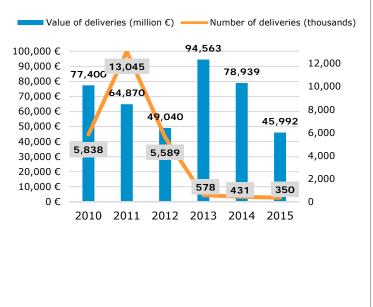
Basic information □ Banking license □ Designated SSS □ Eurosystem eligible SSS □ T2S BIS settlement model: □ Model 1 ☑ Model 2 □ Model 3



Users Securities accounts: 8,443,231 End investor accounts at CSD: Yes End investor accounts mandatory: Yes Total participants: 55 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: Municipal bonds Other services: ☐ NNA ☐ LEI	
deposit and/or settlement: ☐ Equities ☐ ETFs ☐ Government bonds ☐ Corporate bonds ☐ Treasury bills ☐ Commercial paper ☐ Investment funds ☐ Warrants and rights ☐ Emission rights ☐ Other: Municipal bonds Other services:	Services
☐ ETFs ☐ Government bonds ☐ Corporate bonds ☐ Treasury bills ☐ Commercial paper ☐ Investment funds ☐ Warrants and rights ☐ Emission rights ☐ Other: Municipal bonds Other services:	l
_	☐ ETFs ☐ Government bonds ☐ Corporate bonds ☑ Treasury bills ☑ Commercial paper ☐ Investment funds ☐ Warrants and rights ☐ Emission rights
	_

New issues	254
Redemptions	269
Value of securities held on accounts (EUR million)	37,764
Value of deliveries (EUR million)	45,992
Number of deliveries (thousands)	350





National Settlement Depository (NSD)

National Settlement Depository, 12, Spartakovskaya Street, Moscow 105066, Russia www.nsd.ru

Basic information

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

BIS settlement model: s

- ☑ Model 1 (OTC and Exchange transactions)
- ☑ Model 2 (OTC transactions)
- ✓ Model 3 (OTC and Exchange transactions)

Users

Securities accounts: 3,748 End investor accounts at CSD: No End investor accounts mandatory: No

Total participants: 893

■Domestic ■Non-domestic

98% 2%

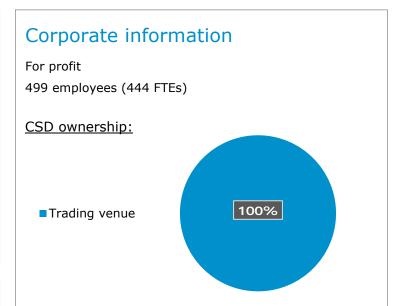


Financial instruments accepted for deposit and/or settlement:

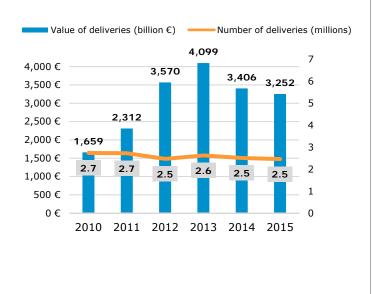
- ☑ Equities
- **☑** ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- ☐ Emission rights
- ☑ Other: Eurobonds, Depositary receipts

Other services:

☑ NNA ☑ LEI



New issues	999
Redemptions	684
Value of securities held on accounts (EUR million)	397,629
Value of deliveries (EUR million)	3,251,633
Number of deliveries (thousands)	2,462





(J)

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

www.euroclear.com

Euroclear Sweden

Basic information

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

BIS settlement model:

- ☑ Model 1
- ☐ Model 2
- ☐ Model 3

Users

Securities accounts: 3,200,000 End investor accounts at CSD: Yes End investor accounts mandatory: No

Total participants: 49

■Domestic ■Non-domestic

73%

27%

Services

Financial instruments accepted for deposit and/or settlement:

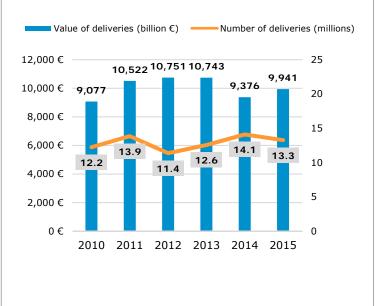
- ☑ Equities
- ☑ ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- ☐ Emission rights
- ☑ Other: Funds, Lottery bonds, Swedish Depositary Receipts

Other services:

☑ NNA



New issues	30,000
Redemptions	26,000
Value of securities held on accounts (EUR million)	1,062,662
Value of deliveries (EUR million)	9,940,815
Number of deliveries (thousands)	13,282





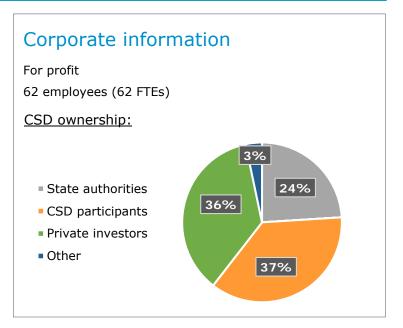
Central Securities Clearing Corporation (KDD)

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

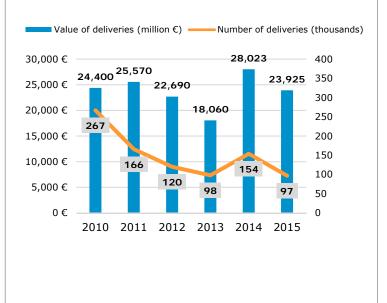
Basic information ☐ Banking license ☑ Designated SSS ☑ Eurosystem eligible SSS ☑ T2S (EUR) BIS settlement model: ☑ Model 1 (OTC DvP transactions) ☑ Model 2 (Exchange transactions) ☐ Model 3

Users Securities accounts: 343,215 End investor accounts at CSD: Yes End investor accounts mandatory: Yes Total participants: 25 Domestic Non-domestic 96% 4%

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	78
Redemptions	114
Value of securities held on accounts (EUR million)	26,100
Value of deliveries (EUR million)	23,925
Number of deliveries (thousands)	97





Central Securities Depository of the Slovak Republic (CDCP SR)

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

www.cdcp.sk

Basic information

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

BIS settlement model:

- ☑ Model 1
- ☑ Model 2
- ☐ Model 3

Users

Securities accounts: 259,573 End investor accounts at CSD: Yes End investor accounts mandatory: No

Total participants: 20

■Domestic ■Non-domestic

80%

Services

Financial instruments accepted for deposit and/or settlement:

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

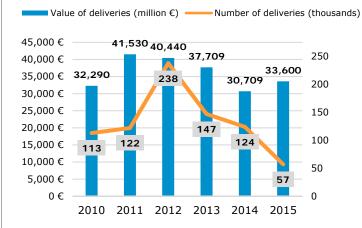
Other services:

☑ NNA ☑ LEI



Securities transactions 2015

New issues	164
Redemptions	197
Value of securities held on accounts (EUR million)	39,976
Value of deliveries (EUR million)	33,600
Number of deliveries (thousands)	57



Note: The significant decrease in the number of deliveries since 2012 is in great part the consequence of a programme allowing individual to sell securities of low value and to transfer them to the National Property Fund of the Slovak Republic.

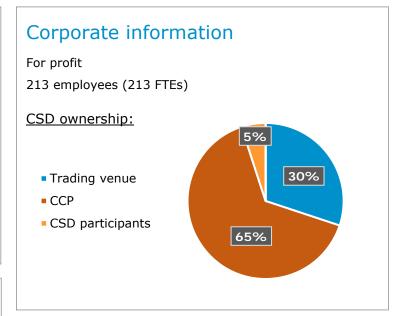


Central Securities Depository of Turkey (MKK)

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



Users

Securities accounts: 45,620,850 End investor accounts at CSD: Yes End investor accounts mandatory: Yes

Total participants: 136

■ Domestic ■ Non-domestic

between direct participants)

100%

Services

Financial instruments accepted for deposit and/or settlement:

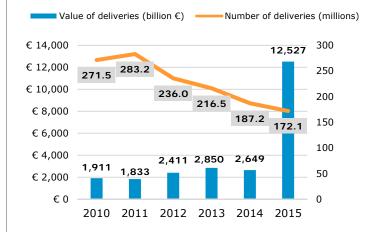
- ☑ Equities
- ☑ ETFs
- ☑ Government bonds
- ☑ Corporate bonds
- ☑ Treasury bills
- ☑ Commercial paper
- ☑ Investment funds
- ☑ Warrants and rights
- ☐ Emission rights
- ☑ Other: ABS, Covered Bonds, Certificates, Sukuks

Other services:

□ NNA □ LEI

Securities transactions 2015

New issues	3,804
Redemptions	3,486
Value of securities held on accounts (EUR million)	277,285
Value of deliveries (EUR million)	12,526,855
Number of deliveries (thousands)	172,126



Note: The value of deliveries in 2015 is unusually high. This is due to the closing of an ETF and to specific operations related to fund assets.



National Depository of Ukraine (NDU)

Public Joint-Stock Company "National Depository of Ukraine", 17/8 Nyzhniy Val Street, Kyiv 04071, Ukraine www.csd.ua

Basic information □ Banking license □ Designated SSS □ Eurosystem eligible SSS □ T2S BIS settlement model: □ Model 1 (OTC and some Exchange transactions)

Users

☐ Model 2

Securities accounts: 11,045 End investor accounts at CSD: No End investor accounts mandatory: No

☑ Model 3 (Exchange transactions)

Total participants: 287

■Domestic ■Non-domestic

100%

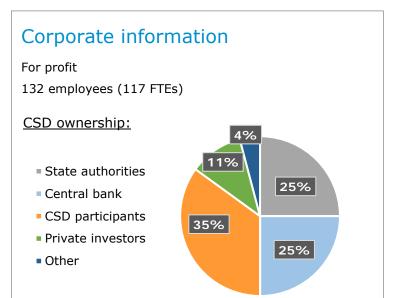
Services

Financial instruments accepted for deposit and/or settlement:

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

Other services:

☑ NNA ☐ LEI



New issues	488
Redemptions	650
Value of securities held on accounts (EUR million)	50,229
Value of deliveries (EUR million)	22,764
Number of deliveries (thousands)	322





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)

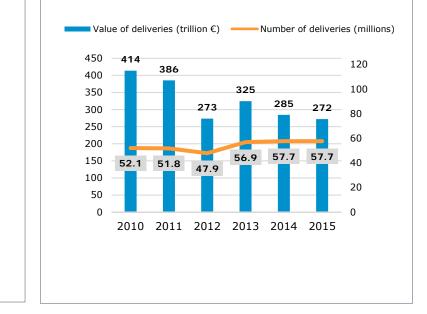
☐ Model 3

Users Securities accounts: 377,727 End investor accounts at CSD: Yes End investor accounts mandatory: No Total participants: 233 Domestic Non-domestic 91% 9%



Securities transactions 2015

New issues	9,612
Redemptions	8,821
Value of securities held on accounts (EUR million)	6,215,293
Value of deliveries (EUR million)	272,086,949
Number of deliveries (thousands)	57,669



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

Annex: Methodology

The data presented in this report has been collected in the first half of 2016 based on information provided by ECSDA members as of 31 December 2015.

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 <u>EU</u> <u>Settlement Finality Directive (SFD)</u>	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
9	T2S participation	Indicates whether the CSD had signed the TARGET2-Securities Framework Agreement as of 31 December	Yes or No

	Column title	Description	Responses
10	T2S currency	When a CSD has signed the T2S	EUR: euro
		framework agreement, indicates which currency will be accepted for	DKK: Danish kroner
		settlement in T2S by that CSD using the 3-letter currency code	Etc.
11	BIS model	Indicates which of the 3 settlement models identified by the Bank of International Settlement (BIS) is used by the CSD	 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 main types of shareholders owning the CSD or, where applicable, the holding company, as at 31 December	 % (rounded to 1 decimal) of company shares/capital owned by the following categories of shareholders: State authorities (e.g. Ministry of finance) Central bank Trading venues (securities or derivatives exchange, MTF or other trading platform) Clearing venue (CCP) CSD participants (whether banks, brokers, issuers, or other institutions) Private/institutional investors (e.g. pension funds, hedge funds, insurance firms) Other
14	Ownership details	Further details, if applicable, on CSD ownership	Free text
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: debt securities issued by national or supranational public authorities with a maturity of more than 1 year Corporate bonds: debt securities issued by private sector entities with a maturity of more than 1 year Treasury bills: debt securities issued by national or supranational public authorities with a maturity of less than 1 year Commercial paper: debt securities issued by private sector entities with a maturity of less than 1 year Investment funds: units in collective investment schemes (UCITS), units in various types of openended funds, pension funds and/or real estate funds
			 Rights and warrants: warrants, allotment rights, subscription rights, other rights issues Greenhouse Gas Emissions: Certified Emission
19	Other	Indicates other types of financial instruments that are accepted by the CSD for deposit and/or settlement	Rights (CER) and EU Emission Allowances (EEA) Free text
20	NNA	Indicates whether the CSD act as national numbering agency (NNA)	Yes or No
21	LEI	Indicates whether the CSD is authorised to allocate Legal Entity Identifiers (LEI) for one or more markets	Yes or No

4. CSD users

	Column title	Description	Responses
22	Domestic participants	Number of participants as at 31 December. Participants include banks, other intermediaries, central banks, CCPs, other (I)CSDs and any other entities having signed a participation agreement with the CSD ⁶ . Participants do <u>not</u> include retail investors or issuers using the CSD's registration service.	Number (no decimals)
		Domestic participants are those located (incorporated) in the same country as the CSD.	
23	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)
24	Total number of participants	Sum of domestic and non-domestic participants	Number (no decimals)
25	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)
26	End investor accounts at CSD level	Indicates whether the CSD provides end investor accounts, defined as a special type of securities accounts in which all the securities belong to a single end investor, and whereby the CSD has access to information on the beneficial owner's identity.	Yes or No
27	End investor accounts at CSD level - Legal requirement	Are end investor accounts at CSD level required by national law or made compulsory by certain rules, at least for certain types of instruments and investors?	Yes or No
28	Number of issuers	Number of issuers using the CSD notary service, defined as the initial record of securities in book-entry form in the CSD system, as at 31 December. The number should include all issuers whose securities are recorded in the CSD system and where the securities. It excludes securities that are held in the CSD through a link (and for which the CSD does not provide notary service).	Number (no decimals)
29	New issues	Total number of new ISIN codes added to the CSD system from 1 January to 31 December. ISIN codes of stripped securities are not included.	Number (no decimals)
30	Redemptions	Total number of ISIN codes deleted in the CSD system from 1 January to 31 December. ISIN codes of stripped securities are not included.	Number (no decimals)

⁶ Indirect participants are excluded. In tiered system (indirect holding markets), participants are typically account holders whereas in tiered systems (direct holding markets), participants will often correspond to account operators. If in a non-tiered system private investors have two types of accounts – holding accounts and trading accounts – and only the trading accounts are operated by an account operator (e.g. in Cyprus or Slovakia), the number of direct participants is the number of trading account operators.

5. **Transactions**

	Column title	Description	Responses
31	Securities held on accounts	Value of securities held on accounts as at 31 December. This comprises securities 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 CSD ⁷ .	Value in million (no decimals), EUR ⁸
32	Number of deliveries	Number of delivery instructions from 1 January to 31 December. This number covers 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)
		If there is segregation on a participant's account with the CSD, delivery instructions to move securities from the participant's own account to its omnibus account and vice versa are included. Similarly, if in a non- tiered system, 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 ² .	
33	Delivery instructions	Same as above ²	Value in million (no decimals), EUR ³

⁷ These data items are based on the same methodology as the ECB statistics on securities settlement systems, see http://www.ecb.int/stats/pdf/securities/sec_methodologicalnote_tcs.pdf?7ba520e792693d66332c1df5e6c28960

⁸ Where needed, ECSDA converts non-EUR amounts into EUR based on the bilateral annual average exchange rate of the relevant year published by the ECB in accordance with ECB Blue book methodology (where available, see detailed notes below)

6. Detailed Notes

Data item(s)	CSD(s) impacted	Remarks
Number of participants	Euroclear UK & Ireland	Difference between ECSDA and ECB data for the UK: The number of participants should only include all financial institutions having signed a participation agreement. Historically (at least until 2015), the ECB has reported more than 20,000 participants for EUI because the Bank of England template includes not only the +/- 250 participants of the CSD, but also the thousands of account holders (institutions or individuals) sponsored by a CREST participant (partly tiered system). However, to ensure consistency across CSDs, only participants (not account holders) should be included in this field.
Currency conversion	Non-EUR area CSDs	Where needed, ECSDA converts non-EUR amounts into EUR based on the bilateral yearly average exchange rate of the relevant year published by the ECB (in accordance with ECB Blue book methodology). This rate is available at: http://sdw.ecb.europa.eu/browse.do?node=2018794 For currencies not included in the ECB database, ECSDA uses the bilateral yearly average exchange rate of the relevant year published by the national central bank of the respective CSD. For example, the exchange rate for UAH is available on the website of the National Bank of Ukraine. Where neither of the above are available, ECSDA uses the bilateral
		yearly average rate according to the exchange rate converter available at: http://www.oanda.com/currency/average
Number of delivery instructions	NCSD	The number of deliveries for Nasdaq CSD Iceland only includes delivery-versus-payment transfers.
	MKK	The number of deliveries in MKK is particularly high compared to other CSDs and is thus not always included in the aggregate or average figures provided by ECSDA. MKK operates more than 40 million end investor accounts in what is by far the largest direct holding market in Europe.
Number and value of	All	Self-collateralisation: Delivery instructions linked to self-collateralisation should be included.
delivery instructions		Remark: Prior to 2013, the UK figures excluded these instructions, but this has been corrected from 2013 onwards.
	Iberclear	Exclusion of the regional SSSs: The figures do not include the value and volume of delivery instructions processed by the regional securities settlement systems, which are reported separately by the ECB.
	Monte Titoli	Scope of delivery instructions: Delivery instructions do not include corporate actions, deposits and withdrawals on securities, money transfers and roll over transactions.
	All	Avoid the double-counting of instructions: Transactions that are based on two instructions, one to deliver securities and one to receive the securities should be counted as one delivery instruction.

Data item(s)	CSD(s) impacted	Remarks
Value of delivery instructions	All	Transaction value by default, market value otherwise: Securities transactions are valued at transaction values. If there is no counter value in the delivery instruction (e.g. free-of-payment transfers, blocking/unblocking of securities in relation to collateral movements), then the market value of the securities should be used. If no market value is available, the latest available price is used.
New issues/ redemptions	All	Nominal value: Until 2013, ECSDA was relying on the ECB Blue Book methodology which required that the value of new issues and redemptions be based on the nominal value of the securities. This value can be very different from market value, especially for equities, and so including equities was a challenge.
		As a result, from 2014 onwards, ECSDA only collects data on the number of new issues and redemptions (irrespective of the nominal value). This number should correspond to the number of new ISINs created and deleted during the year.



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