

C) CORE ACTIVITIES

C1) MONETARY POLICY

- The national central banks (NCBs) of the **Eurosystem** implement the monetary policy decided by the Governing Council of the European Central Bank (ECB). The ECB' strategy is based on two pillars: **a) an economic analysis**, based on a broad scale of leading indicators, of the outlook for price developments and the risks to price stability. Moreover, the ECB sets a target for inflation as «a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area over the medium term **below, but close to 2%**» **b) a monetary analysis** based mainly on prominent role to money announced as quantitative reference value for monetary growth aggregate **M3**.

- There are other central banks outside the Eurosystem which set a non monetary but a **direct inflation target** strategy as the Bank of England, the Royal Bank of Sweden, the National Bank of Poland, the Czech National Bank, the National Bank of Romania, the Bank of Norway, the Swiss National Bank - which aims also at a balanced development of economic activity-, the National Bank of Serbia and the Central Bank of Iceland.

- Other central banks set a monetary **exchange rate target** strategy as the Danmarks Nationalbank, the Bank of Estonia, the Bank of Latvia and the Bank of Lithuania.

C2) FOREIGN EXCHANGE POLICY

There is not until now, a foreign exchange policy by the European Union, i.e. formal agreements on an exchange rate system for the euro vis-a-vis non-Community currencies or general orientations for exchange rate policy vis-a-vis these currencies from the Ecofin council. Consequently, talking about the foreign exchange policy of the Eurosystem we refer for the time being to interventions conducted by the ECB in the foreign exchange markets in order to influence the exchange rate of the euro and the limits set by the ECB to the Eurosystem NCBs to conduct large foreign exchange operations only with previous notification or approval.

C3) PAYMENT SYSTEMS

- All central banks carry out **oversight** of payment systems and instruments.
- The NCBs of the Eurosystem participated in the TARGET1 system, which was fully decentralised. It consisted of the real-time gross settlement (**RTGS**) systems of the NCBs, the payment mechanism of the European Central Bank (ECB/PM) and the interlinking system. Regarding the other central banks, a real-time gross settlement (RTGS) system existed in a large part of central banks as of Poland (SORBNET), Hungary (VIBER), Tzech Republic (CERTIS), Slovenia (SIBPS), Estonia (EP RTGS), Lithuania (LITAS), Latvia (SAMS), Malta (MaRIS), Bulgaria (RINGS) while the National Bank of Romania participated by 33,33% in the share capital of the company TransFonD managing the electronic clearing system. The other NCBs were modernised their systems or were linked indirectly with the TARGET1 system (see below) or wait to participate in the TARGET2 system as from 2007 onwards.
- The new member states' central banks were connected with the TARGET1 system as follows: in mid-October 2004, the Bank of Slovenia entered the TARGET1 system through an indirect link with the Deutsche Bundesbank system RTGSplus. The National Bank of Poland joined on 7.3.2005 the TARGET1 system via the Bank of Italy RTGS' BIREL. This is done for cross border payments while domestic payments in euro were carried out in the Polish SORBNET Euro system. All others NCBs would join later when they will adopt the euro. This likely coincides with the function of SSP.
- As far as **retail payments and securities clearing** are concerned the ESCB don't participate as operator but limits its authority to monitor the smooth operation of retail payment and settlement systems. However, there are NCBs that manage such systems as the Bank of Greece and the National Bank of Belgium which to a lesser extent maintain the cheques clearing houses, the Bank of Italy which manages the local sub-system of the BI-COMP for the interbank retail payments, the Central Bank of Luxembourg managing the LIPS-net system, the National Bank of Belgium being the operator of CEC - a system processing low value payments - the Bank of Greece presiding over the low values-system DIAS without being operator of the system. The Bank of Estonia manages the system ESTA for low value payments as well as the Bank of Latvia is the owner of the system EKS for interbank retail payments. The Central Bank of Malta manages a traditional

system of retail payments, the National Bank of Hungary manages the system KELLER for securities clearing and the Czech National Bank manages the SKD system for clearing short term securities. The Bank of Slovenia manages the system SIBPS used also for urgent small payments and for the settlement of securities transactions on organised markets, the Bank of Lithuania managed the system LITAS used not only for gross payments but also for retail payments. The Bank of Greece is the owner and operator of the Electronic Secondary Securities Market (HDAT).

TARGET2

On 24 October 2002 the Governing Council of the ECB took a strategic decision on establishing a new radical version of the TARGET system called TARGET2. The old version, which had an heterogeneous technical design reflecting the reality of the previous decade, should be replaced to meet the users expectations and face to new challenges as the E.U enlargement and the increased market competition. The main features of TARGET2 are the following:

- a) multiple-platform system with a broadly defined and harmonised core service offered by all platforms
- b) a single price structure for domestic and cross-border transactions applicable to the core service
- c) cost effectiveness, which implies that the single price is based on the most efficient RTGS system i.e. the system with the lowest cost per item
- d) by the end of a four-year period after the start of TARGET2 operations, subsidies going beyond an acceptable public good factor have to be phased out obligatorily i.e. platforms which do not comply with this requirement will have to be given up. Anyway, the NCBs will remain responsible for keeping settlement accounts and business relations with credit institutions

- e) the multiple-platform TARGET2 system would consist of individual platforms and, in the first 3 years of its operation, one shareable platform available to those NCBs which will decide to give up their individual platforms on a voluntary basis. After this initial period, any NCBs will be free either to maintain its individual platform, or to join the already existing shareable platform, or to create another shareable platform with any other NCB that is willing to do so
- f) the single shareable platform will not be implemented until the central banks have finally decided to join it
- g) all platforms that are part of TARGET2 shall be subject to the same guiding principles as for pricing, cost recovery, access, core services
- h) TARGET2 will process payments that 1) must obligatory channeled via TARGET i.e. monetary policy payments and settlements of ancillary large-value systems 2) the Eurosystem considers desirable to be processed via TARGET as is the case of large value payments and 3) other payments that users choose to channel via TARGET without any amount limit
- i) apart from the commonly provided core service, each platform may provide additional services on the basis of a consultation of the users
- j) a single interface to TARGET2 system would be beneficial; it is very likely that, including the user interface, will be based on harmonised use of SWIFT message standards
- k) the shareable platform will be financed by the central banks participating in this platform. Individual platforms will be financed by central banks maintaining them
- l) for the TARGET2 core service, there will be a single-wide price structure. Additional services can continue to be priced separately and independently by each central bank
- m) TARGET2 will start when the relevant Guideline comes into force, all TARGET components provide the core services which are offered at a single price and the shared platform is operational

- n) The acceding countries NCBs will be given the same rights and obligations with regard to the TARGET connection as the current non-euro area NCBs. For those that do not wish to establish their own euro-RTGS platform, an interim solution will be offered until the shareable platform becomes available.

A consultation procedure with the users community i.e. credit institutions started. The latter ask for a more homogeneous and efficient TARGET2 system, an improved liquidity and information management, a lower price for core services, identical technical interfaces, communication standards, message formats harmonisation, internationally accepted banking technology, a system coherent with market practices and a permanent dialogue with the ECB regarding users requirements and technical implementation.

Finally, only one proposal submitted to the ECB for the establishment of a **Single Shareable Platform (SSP)**. It was this of **NCBs of Germany, France and Italy**. No other platforms were established. In 16.2.2004 the ECB Governing Council decided to adopt this proposal. The phases of the TARGET2 project are initially the following:

- ▶ Pre-project phase: October 2002-June 2004.
 - definition of the core features and functions,
 - finalisation of the common cost methodology,
 - issues related to the straight through processing (STP).
- ▶ Project phase: July 2004-end 2005.
 - definition of the users detail requirements and the technical specifications,
 - development of the project.
- ▶ Testing and trial operations phase: January 2006- end 2006.
 - intensive tests,
 - trial operations before the start of live production,
- ▶ 2 January 2007: live production.

Mais ce plan était impossible à être appliqué.

But in practice, it was impossible this plan to be timely realized.

Until the first months of 2005 the following progress was made:

- In September 2004, the Governing Council adopted a Guideline on the governance of TARGET2: a) Level 1: the Governing Council has the responsibility on the administration, management and control of the system b) Level 2: The Payment and Settlement Systems Committee (PSSC) of the ECB is competent for the day-to-day management and, in addition, will continue its advisory function towards the Governing Council c) Level 3: the three NCBs (Banque de France, Deutsche Bundesbank and Banca d' Italia), providing the single shareable platform (SSP), manage its day-to-day function on the basis of agreements providing services. All the other NCBs are involved to the application of tasks of the levels 2 and 3.
- The PSSC elaborated a proposal on the cost of a help desk function for TARGET2 that will be included in the calculation of the price for the users.
- The estimated annual total cost of the liquidity pooling feature is around EUR 900.000. A survey showed that between 60 and 120 accounts could be pooled, resulting in an annual fee per pooled account of between EUR 7.500 and EUR 15.000 in order to recover the cost of the liquidity pooling feature. Regarding the pricing methodology for a possible dual pricing scheme for the TARGET2 core services which should allow participants to choose between a transaction fee only or a lower transaction fee plus a periodical fee, the ECB elaborated a scheme which a) should permit recovery of a very large part the total cost of TARGET2 b) the highest transaction fee should not exceed EUR 0,80 and c) the lower transaction fee should reach EUR 0,25 per transaction.
- The work for the structural questions like some cost and financing issues and the definition of the users' detail requirements and business and technical specifications were completed during the first quarter of 2005.
- They follow the software development, the establishment of the technical infrastructure, the preparation of the operational and legal framework and the testing and migration activities of central banks.
- In July 2004, the Governing Council approved the General Functional Specifications for the SSP, on which comments by the TARGET users had been sought before. In December 2004, the Governing Council accepted the offer made by the three central banks and approved the building of the SSP for TARGET2 operations.

■ All Eurosystem central banks will participate in TARGET2. The Bank of England and Danmarks Nationalbank have confirmed their participation; while the Sveriges Riksbank will not connect to TARGET2 (the Swedish banks will seek other solutions for the settlement of their euro payments). Some new Member States central banks will only participate when they adopt the euro.

■ For the core service the ECB decided to propose two options to the participants:

OPTION A'	OPTION B'
Standard commission per month: 100 euros and Single Price per transaction: 0,80 euro	Standard commission per month: 100 euros and Diversified price per transaction as follows: <ul style="list-style-type: none"> ▪ From 1 by 10.000 transactions: 0,60 euro ▪ From 10.001 by 25.000 transactions: 0,50 euro ▪ From 25.001 by 50.000 transactions: 0,40 euro ▪ From 50.001 transactions and over: 0,20 euro.

■ The migration strategy will not start with a bing bang approach, but central banks will remove in several groups. The updated and revised time frame follows:

TARGET2 main stages 2005-2008		
1	November 2005	User Detailed Functional Specifications – UDFS document completion.
2	April 2005 – December 2005	Development of the Single Shareable Platform (SSP).
3	January 2006 – March 2006	Internal tests of the SSP.
4	April 2006 – May 2006	User Acceptance Tests, UAT by the participating NCBs.
5	June 2006 onwards	Tests in live production environment. The participation to the final tests, including also the users community (credit institutions etc) started in

		May 2007. Regarding the first migration group, the time frame is oppressive (only 5 months). On the contrary, for the others a time relaxation exists.
6	19 November 2007	Migration to the live production of the first wave: <ul style="list-style-type: none"> • Austria • Germany • Cyprus • Latvia • Lithuania • Luxembourg • Malta • Slovenia
7	18 February 2008	Migration to the live production of the second wave: <ul style="list-style-type: none"> • Belgium • France • Ireland • Spain • The Netherlands • Portugal • Finland
8	19 May 2008	Migration to the live production of the third wave: <ul style="list-style-type: none"> • Danmarks • Greece • Estonia • European Central Bank • United Kingdom • Italy • Poland

C4) FOREIGN EXCHANGE AND EURO RESERVES MANAGEMENT

All national central banks manage their FX reserves and sometimes the FX reserves of the State. The NCBs of the Eurosystem manage also the national quota of FX reserves of the European Central Bank (ECB). The system functions on a partially decentralised basis. The ECB formulates the management rules, the benchmarking portfolios, the procedures, a list of eligible instruments, the modified duration and VAR method application and in general the risk management policy, carries out the evaluation of NCBs performance and disposes to the NCBs its FX reserves management electronic system «WSS Suite» for the registration of Front Office operations. This system is used by the ECB as well as for the Back Office and Middle Office applications with the exception of settlements of the Eurosystem' reserves effected by NCBs. Recently, the ECB made an effort to centralise the system through common upgrade projects and the establishment of one single share platform, which will be ready in 2014. The Eurosystem NCBs manage also the national reserves and the reserves in euro but are obliged to report to the ECB some high value transactions or to ask a prior approval for high FX transaction values.

C5) BANK OF BANKS

The role of bank of banks is limited today to opening and managing current accounts of the credit institutions. However, we see in some NCBs other facilities as: **a)** credit rating of enterprises that permit to

banks to select appropriate collateral (Banque de France, Deutsche Bundesbank, National Bank of Austria, Bank of Spain). Already, this activity is extended in all Eurosystem NCBs for “bank loans” according to the new collateral system **b)** currency centers as in National Bank of Belgium, Bank of Greece etc **c)** Central Risk Data Offices used primarily by banks (Bank of Spain, National Bank of Belgium, Bundesbank, Bank of Italy, Bank of Portugal, Bulgarian National Bank, National Bank of Serbia) **d)** the NCBs continue to be lenders of last resort but in the Eurosystem this role was replaced by the procedures of the single monetary policy.

C6) BANKING SUPERVISION

- During the recent years NCBs were threatened by the trend of some national governments to create **super-regulatory authorities** outside of central banks. This model was established:

- ▼ in the United Kingdom with the Financial Services Authority (FSA)

- ▼ in Luxembourg with the Commission of Financial Sector Supervision

- ▼ in some Scandinavian and Baltic countries

- ▼ in Malta the banking supervision was transferred to the Malta Financial Services Centre (MFSC)

- ▼ in Iceland also the banking supervision was transferred to the Financial Services Authority.

- Among the other countries this trend was confirmed in the following cases but the supervision is carried out with the **collaboration** of the central bank:

- a)** in Austria, the banking supervision was transferred from the central bank to the Financial Market Authority (FMA). However, the central bank, on the basis of supervisory data, assesses the risk levels of individual banks and is commissioned by the FMA to carrying out on-site inspections of banks

- b)** in Hungary, although the Hungarian Banking and Capital Market Supervisory Authority (HBCMS) is the primary responsible for the supervision of individual credit institutions, the National Bank of Hungary has signed a co-operation agreement under which the two institutions can share information and co-ordinate reporting and on-site inspections

c) in Germany, although the banking supervision belongs to the Federal Financial Supervisory Authority (BaFin), the Bundesbank evaluates documents, reports, annual accounts and auditors' reports submitted by the institutions as well as regular audits of banking operations

d) in Finland, the supervision was transferred to the Financial Supervision Authority of Finland, which is an independent entity but it collaborates closely with the central bank

e) in Estonia, the supervision was transferred to the Financial Supervision Authority but it is about an autonomous agency of the central bank.

● On the contrary, in some countries **the central banks fortified their position** in the area of supervision:

▲ in Ireland, where the Irish Financial Services Regulatory Authority was incorporated into the central bank which carries out now banking and financial supervision and consumer information and protection

▲ in the Netherlands, the Parliament entrusted the prudential objective of all sectors to the central bank and to the Pension and Insurance Supervisory Authority, which was merged into the central bank

▲ in Greece, the central bank beyond the banking and financial supervision participates in the supervision of investments of social security funds. Moreover, it is the competent authority to examine and certify the professional efficiency of employees and executives of credit institutions.

● In 2007, the number of NCBs carrying out supervision was the following:

▪ Eurosystem: 10 out of 16
▪ ESCB: 15 out of 27
▪ Accession countries: 1 out of 1
▪ ESCB + accession countries: 16 out of 28
▪ 33 examined NCBs: 18 out of 33.

The trade unions of central banks accept the co-ordination of all the supervisory authorities (banking, financial and stock exchange authorities) but they oppose against the concentration of all instances within a single authority outside the central bank. They accept, also, the model of the Bank of France and the Bank of Italy according to which the central banks are authorised to carry out on-site and off-site inspections. One of the primary objectives of the SCECBU (Standing Committee of European Central Bank Unions) and its affiliated unions is to protect and extend the exclusive right to the banking supervision of NCBs. The SCECBU is also against a centralisation model in the ECB level except the case of international financial conglomerates for which a co-ordination and exchange of information procedure is needed. In this case, the ECB may assume only co-ordinative tasks while the NCBs will continue to make on-site and off-site inspections in their countries.

TABLE 3
BANKING SUPERVISION

COUNTRY	SUPERVISORY AUTHORITY
A) EUROZONE	
1) Germany	The banking supervision belongs to the Federal Financial Supervisory Authority (BaFin , Bundesanstalt für Finanzdienstleistungsaufsicht) which collaborates closely with the Bundesbank. The BaFin supervises banks, insurance undertakings and securities companies and markets. The Bundesbank evaluates documents, reports, annual accounts and auditors' reports submitted by the institutions as well as regular audits of banking operations.
2) Greece	Central bank

3) Finland	The Financial Supervision Authority of Finland (Rahoitustarkastus), which is an independent entity collaborating closely with the central bank.
4) Spain	Central bank
5) Ireland	Central bank On 1 May 2003, the Irish Financial Services Regulatory Authority (IFSRA) was established and incorporated as a separate entity into the central bank, which renamed as the Central Bank and Financial Services Authority of Ireland.
6) Italy	Central bank Acting following a mandate of CICR.
7) Luxembourg	The banking supervision was transferred to the Commission of Financial Sector Supervision (CFSS) that supervises credit institutions, financial and securities companies and the Stock Exchange.
8) The Netherlands	Central bank

	<p>A legal reform entrusted the prudential objective of all sectors to the central bank and to the Pension and Insurance Supervisory Authority, which was merged into the central bank except the consumers and investors protection which entrusted in The Financial Market Authority.</p>
<p>9) Austria</p>	<p>As of April 1, 2002 the banking supervision was transferred from the central bank to the Financial Market Authority (FMA) (Finanzmarktaufsicht) which supervises banks, insurance companies, securities transactions and pension funds. <u>The central bank</u>, on the basis of supervisory data, assesses the risk levels of individual banks and is commissioned by the FMA to <u>carrying out on-site inspections of banks</u>.</p>
<p>10) Portugal</p>	<p>Central bank</p>
<p>11) Belgium</p>	<p>The Belgian Banking, Financial and Insurance Commission.</p> <p>According to a new arrangement a coordinating authority was established, the <u>Committee of Financial Stability</u>. It coordinates the oversight of payment and settlement systems (National Bank of Belgium) and the prudential supervision of banks and financial and insurance companies (the Belgian Banking, Financial and Insurance Commission). It is presided over by the Governor of the National Bank of Belgium while the Bank</p>

	is represented in the Governing Board of the Committee also by other members. In this way the central bank plays a more significant role in the supervision of the financial system as a whole.
12) France	The Banking Commission which entrusts the on-site and off-site controls to the agents of the Bank of France.
13) Slovenia	Central bank
14) Cyprus	Central bank
15) Malta	The banking supervision was transferred to the Malta Financial Services Centre (MFSC) that supervises credit and financial institutions.
16) Slovakia (as from 1.1.2009)	Central bank
Eurosystem comparison	NCB as Supervisory Authority 10 out of 16
B) ESCB-OUTSIDE OF THE EURO ZONE	
17) United Kingdom	The banking supervision was

	transferred to the Financial Services Authority (FSA) that has incorporated all the surveillance authorities of the country.
18) Denmark	The Financial Supervisory Authority (Finanstilsynet).
19) Sweden	The Financial Services Inspection (Finansinspektionen).
20) Poland	The banking supervision was transferred to the Commission for Banking Supervision (Komisja Nadzoru Bankowego) while the General Inspectorate of Banking Supervision, GINB (Generalny Inspektorat Nadzoru Bankowego), which is organisationally autonomous within the structure of the National Bank of Poland, exercises the on-site and off-site controls.
21) Hungary	The Hungarian Banking and Capital Market Supervisory Authority (HBCMS). The central bank has signed a co-operative agreement under which the two institutions <u>can share information and co-ordinate on-site and off-site controls.</u>
22) Czech Republic	Central bank

23) Estonia	The Financial Supervision Authority (Finantsinspektorat), which is an <u>autonomous agency of the central bank</u> supervising banks, insurance undertakings and securities market companies.
24) Lithuania	The Financial Supervision Authority.
25) Latvia	The Commission for Supervision of Financial Institutions (Finanšu un Kapitāla Tirgus Komisija).
26) Romania	Central bank
27) Bulgaria	Central bank
ESCB comparison	<p>NCB as Supervisory Authority</p> <p>15 out of 27</p>
C) ACCESSION COUNTRIES	
28) Croatia	Central bank
ESCB + Accession countries	NCB as Supervisory Authority

comparison	16 out of 28
D) OTHER EUROPEAN COUNTRIES	
29) Switzerland	The Federal Banking Commission.
30) Norway	The Financial Supervisory Authority.
31) Iceland	The banking supervision was transferred to the Financial Services Authority.
32) Serbia	Central bank
33) Montenegro	Central bank
Total of 33 NCBs comparison	NCB as Supervisory Authority 18 out of 33

NCBs charged with the supervision of Insurance Companies	NCBs charged with the supervision of Pension Funds
1) De Nederlandsche Bank	1) De Nederlandsche Bank
2) National Bank of Slovakia	2) National Bank of Slovakia
3) Central Bank and Financial Services Authority of Ireland	3) National Bank of Serbia
4) Czech National Bank	
5) National Bank of Serbia	

C7) ISSUANCE AND PRODUCTION OF FIDUCIARY MONEY

According to the article 16 of the Statute of the ESCB and of the ECB, the Governing Council of the ECB has the exclusive right to authorise the **issue** of banknotes within the euro area. The ECB and the national central banks may issue such banknotes. The ECB respects as far as possible existing practices regarding the issuing and design of banknotes. According to the article 108.3 of the Treaty on the European Union, Member States may issue coins subject to ECB approval regarding the volume of the issue. Consequently, in the Eurozone the issue right for banknotes belongs to the Eurosystem and the Governing Council of the ECB takes the relative decision, while the issue right for coins belongs to the Member States, which have entrusted the respective responsibility to the Ecofin Council. The approval required by the ECB, regarding the volume of coins, is based on its responsibility to control the monetary expansion. In the other European countries, the central bank has the exclusive right to issue banknotes and the Ministry of Finance to issue coins. However, there are exceptions to the rule. The following NCBs have the privilege to issue banknotes as well as coins: Bank of Norway, National Bank of Serbia, National Bank of Croatia, Central Bank of Cyprus, National Bank of Hungary, Tzech National Bank, Bank of Estonia, Central Bank of Malta and National Bank of Romania.

- Regarding the **production** of fiduciary money there are different practices in the European countries. We may distinguish three main categories:

a) NCBs which print banknotes and at the same time mint coins: Bank of Greece, Central Bank and Financial Services Authority of Ireland, National Bank of Austria through its two subsidiary companies, National Bank of Denmark which incorporates the printing works and mints coin through a subsidiary company, National Bank of Hungary through its two subsidiary companies and National Bank of Serbia

b) NCBs which print banknotes only: Bank of France, National Bank of Belgium, Bank of Italy, Bank of Portugal through its subsidiary company Valora, Swiss National Bank which keeps the majority of

share capital of the company Orell, National Bank of Romania and Bulgarian National Bank.

c) NCBs that don't have neither a printing works nor a mint: Bank of England, Deutsche Bundesbank, Bank of Finland, Bank of Spain, Central Bank of Luxembourg, Central Bank of Cyprus, National Bank of Poland, Czech National Bank, Bank of Latvia, National Bank of Slovakia, Bank of Estonia, Central Bank of Malta, Bank of Slovenia, Bank of Norway, Central Bank of Iceland, National Bank of Croatia and Central Bank of Montenegro.

TABLE 4
WHO PRINTS BANKNOTES AND MINTS COINS IN
EUROPEAN COUNTRIES

	BANKNOTES	COINS
EURO ZONE		
1) Germany	<p>a) The private company «Giesecke und Devrient» with two industrial sites in Munich and Leipzig.</p> <p>b) The «Bundesdruckerei Group» in Berlin belonging to the multinational English company APAX Partners.</p>	The five State mints in Hambourg, Berlin, Stuttgart, Munich and Karlsruhe.
2) Greece	Central bank.	Central bank.
3) Finland	The company SETEK OY at Vantaa, which belonged by 40% to the central bank. As from October 2003, SETEC OY was privatised. The B.F sold its portion and the State another 20% to the private institutional investors Finish National Fund for Research and Development Sitra, Finish Industry Investment Ltd, Varma-Sampo Limited and Fennia Life Company Ltd.	The State company «Suomen Rahapaja Oy», at Vantaa, supervised by the Ministry of Finance.

4) Spain	The State company «Fabrica Nacional de Moneda y Timbre», FNMT, Madrid.	The State company «Fabrica Nacional de Moneda y Timbre», FNMT, Madrid.
5) Ireland	Central bank.	Central bank.
6) Italy	Central bank.	The «Istituto Poligrafico e Zecca dello Stato SpA», Rome.
7) Luxembourg	Tender operations.	The Royal Mint of Belgium, Brussels.
8) Netherlands	The private company of the Netherlands “Johan Entchedé and Zn”, Harlem.	The State company «De Koninklijke Nederlandse Munt NV» (Royal Mint of the Netherlands), Utrecht.
9) Austria	The «Oesterreichische Banknoten und Sicherheitsdruck GmbH», Vienna , a fully-owned subsidiary company of the central bank.	The «Oesterreichische Münze AG (OMAG)», Vienna, a fully-owned subsidiary company of the central bank.
10) Portugal	The company VALORA at Carregado. The Bank of Portugal keeps 75% of its share capital and the English company DE LA RUE 25%.	The State company INCM (Imprensa Nacional - Casa da Moeda S.A), Lisbon.
11) Belgium	Central bank.	The State company ‘the Royal Mint of Belgium’, Brussels.
12) France	Central bank.	The Mint at Pessac, administered by the Coin and Medal Direction of the Ministry of Finance.

13) Slovenia	Tender operations.	Tender operations.
14) Cyprus	Tender operations.	Tender operations.
15) Malta	The De La Rue' factory in Malta.	Tender operations.
16) Slovakia (as from 1.1.2009)	Tender operations.	Tender operations.
Eurosystem comparison	NCB printing banknotes 7 out of 16	NCB striking coins 3 out of 16
E.E-OUTSIDE THE EURO ZONE		
17) United Kingdom	The English private company De La Rue.	The State company «Royal Mint» at Liantrisant.
18) Danmark	Central bank.	The company "the Royal Mint" (Den Kongelige Mont), at Brøndby, a fully- owned subsidiary company of the central bank.
19) Sweden	The company AB TUMBA BRUK, at Tumba, which was sold, on 1 st January 2002 to the US Crane & Co Inc.	The Finnish mint, "Rahapaja Oy".
20) Poland	The State "Polish Banknote and Security Manufacturers SA" (Polska Wytwornia Papierow Wartosciowych SA), in Krakov.	The State Mint (Mennica Panstwowa plc) in Warsaw.
21) Hungary	The Hungarian Banknote	The Hungarian Mint LTD, a

	Printing Corporation (Pénzügyi Szervezetek Állami Felügyelete, PSZÁF), a fully owned subsidiary company of the central bank.	fully owned subsidiary company of the central bank.
22) Czech Republic	The State Securities Printing Office, Prague.	The Czech Mint (Česká mincovna) belonging to the private company "Jablonex Group a.s", at Jablonec nad Nisou. It is under the direct supervision of the central bank regarding the production of circulation coins.
23) Estonia	Tender operations.	Tender operations.
24) Lithuania	Tender operations.	The state company 'Lithuanian Mint' (Lietuvos Monetu Kalykla) in Kaunas, which works in close collaboration with the central bank.
25) Latvia	Tender operations.	Tender operations.
26) Romania	Central bank.	The State Mint of Romania, (R.A Monetăria Statului a României), Bucharest.
27) Bulgaria	Central bank.	The State Mint.
Total ESCB comparison	NCB printing banknotes 11 out of 27	NCB striking coins 5 out of 27
C) ACCESSION COUNTRIES		
28) Croatia	Tender operations.	Tender operations.

Total ESCB + Accession countries comparison	NCB printing banknotes 11 out of 28	NCB striking coins 5 out of 28
D) OTHER EUROPEAN COUNTRIES		
29) Switzerland	The «Orell Füssli Sicherheitsdruck AG». <u>The majority of its share capital belongs to the central bank</u> while the remaining shares are spread among many individual investors.	The Swiss Federal Mint (Swissmint) in Berne, which belongs to the Federal Government.
30) Norway	In 2007 the Bank of Norway Printing Works wound up. According to a contract, as from January 2008 by the end of 2012, the BN will purchase banknotes from: 1) De La Rue International Limited in the UK and 2) Francois-Charles Oberthur Fiduciaire in France.	On June 30, 2003 the Bank of Norway sold its fully own subsidiary company "the Royal Norwegian Mint" 1) by 50% to the major Norwegian coin dealer company Samllerhuset AS, Oslo and 2) by 50% to the Mint of Finland. On July 1, 2004 the company was renamed as "the Mint of Norway".
31) Iceland	Tender operations.	Tender operations.
32) Serbia	The Institute for Manufacturing banknotes and coins that is incorporated in the structure of the central bank.	The Institute for Manufacturing banknotes and coins which is incorporated in the structure of the central bank.
33) Montenegro	Tender operations.	Tender operations.
Total of 33	NCB printing banknotes	NCB striking coins

NCBS comparison	13 out of 33	6 out of 33
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