II

(Acts whose publication is not obligatory)

EUROPEAN CENTRAL BANK

GUIDELINE OF THE EUROPEAN CENTRAL BANK

of 3 February 2005

amending Guideline ECB/2000/7 on monetary policy instruments and procedures of the Eurosystem

(ECB/2005/2)

(2005/331/EC)

THE GOVERNING COUNCIL OF THE EUROPEAN CENTRAL BANK,

Having regard to the Treaty establishing the European Community and in particular to the first indent of Article 105(2),

Having regard to the Statute of the European System of Central Banks and of the European Central Bank and in particular Article 12(1) and Article 14(3) in conjunction with the first indent of Article 3(1), Article 18(2) and the first paragraph of Article 20,

Whereas:

(1) Achieving a single monetary policy entails defining the instruments and procedures to be used by the Eurosystem, consisting of the national central banks (NCBs) of Member States that have adopted the euro (hereinafter the participating Member States) and the European Central Bank (ECB), in order to implement such policy in a uniform manner throughout the participating Member States.

(2) The ECB has the authority to establish the necessary guidelines to implement the Eurosystem's single monetary policy and the NCBs have an obligation to act in accordance with such guidelines.

(3) Recent changes to the definition and implementation of the Eurosystem's single monetary policy need to be reflected appropriately by replacing Annex I to the ECB Guideline on monetary policy instruments and procedures of the Eurosystem that is currently in force.

(4) In accordance with Article 12(1) and Article 14(3) of the Statute, ECB guidelines form an integral part of Community law,

HAS ADOPTED THIS GUIDELINE:

Article 1

Principles, instruments, procedures and criteria for the implementation of the Eurosystem's single monetary policy

Annex I to Guideline ECB/2000/7 of 31 August 2000 on monetary policy instruments and procedures of the Eurosystem [1] is replaced by the Annex to this Guideline.

Article 2

Verification

The NCBs shall forward details of the texts and means by which they intend to comply with this Guideline to the ECB by 15 March 2005 at the latest.

[1] OJ L 310, 11.12.2000, p. 1. Guideline as last amended by Guideline ECB/2003/16 (OJ L 69, 8.3.2004, p. 1).

Article 3

Entry into force

This Guideline shall enter into force two days after its adoption. Article 1 shall apply from 30 May 2005.

Article 4

Addressees

This Guideline is addressed to the NCBs of participating Member States.

Done at Frankfurt am Main, 3 February 2005.

For the Governing Council of the ECB

The President of the ECB

Jean-Claude TRICHET

ANNEX

'ANNEX I

THE IMPLEMENTATION OF MONETARY POLICY IN THE EURO AREA

General documentation on Eurosystem monetary policy instruments and procedures

February 2005

CONTENTS

Abbreviations

CCBM	correspondent central banking model
C.E.T.	Central European Time
CIs	credit institutions
CSD	central securities depository
DVP	delivery-versus-payment
EC	European Community
ECB	European Central Bank
EEA	European Economic Area
EEC	European Economic Community
EPM	ECB payment mechanism
ESCB	European System of Central Banks
EU	European Union
FOP	free of payment
FRN	floating-rate note
IDC	intraday credit
ISIN	International Securities Identification Number
MFI	monetary financial institution
MMF	money market fund
MMP	money market paper
NCB	national central bank
RoW	rest of the world
RTGS	real-time gross settlement
SSS	securities settlement system
Strip	separate trading of interest and principal
TARGET	Trans-European Automated Real-time Gross settlement Express Transfer system
UCITS	undertaking for collective investment in transferable securities

Introduction

This document presents the operational framework chosen by the Eurosystem [1] for the single monetary policy in the euro area. The document, which forms part of the Eurosystem's legal framework for monetary policy instruments and procedures, is intended to serve as the "General Documentation" on the monetary policy instruments and procedures of the Eurosystem, and is aimed, in particular, at providing counterparties with the information they need in relation to the Eurosystem's monetary policy framework.

The General Documentation in itself neither confers rights nor imposes obligations on counterparties. The legal relationship between the Eurosystem and its counterparties is established in appropriate contractual or regulatory arrangements.

This document is divided into seven chapters. Chapter 1 gives an overview of the operational framework for the monetary policy of the Eurosystem. In Chapter 2, eligibility criteria for counterparties taking part in Eurosystem monetary policy operations are specified. Chapter 3 describes open market operations, while Chapter 4 presents the standing facilities available to counterparties. Chapter 5 specifies procedures applied in the execution of monetary policy operations. In Chapter 6, the eligibility criteria for underlying assets in monetary policy operations are defined. Chapter 7 presents the Eurosystem's minimum reserve system.

The annexes contain examples of monetary policy operations, a glossary, criteria for the selection of counterparties for Eurosystem foreign exchange intervention operations, a presentation of the reporting framework for the money and banking statistics of the European Central Bank, a list of the Eurosystem websites and a description of the procedures and sanctions to be applied in the event of non-compliance with counterparty obligations.

(1) The Governing Council of the European Central Bank has agreed to use the term "Eurosystem" to denote those components of the European System of Central Banks that carry out its basic tasks, i.e. the European Central Bank and the national central banks of those Member States which have adopted the single currency in accordance with the Treaty establishing the European Community.

CHAPTER 1

1. OVERVIEW OF THE MONETARY POLICY FRAMEWORK

1.1. The European System of Central Banks

The European System of Central Banks (ESCB) consists of the European Central Bank (ECB) and the national central banks of the European Union (EU) Member States ([2]). The activities of the ESCB are carried out in accordance with the Treaty establishing the European Community (Treaty) and the Statute of the European System of Central Banks and of the European Central Bank (Statute of the ESCB). The ESCB is governed by the decision-making bodies of the ECB. In this respect, the Governing Council of the ECB is responsible for the formulation of monetary policy, while the Executive Board is empowered to implement monetary policy according to the decisions made and guidelines laid down by the Governing Council. To the extent deemed possible and appropriate and with a view to ensuring operational efficiency, the ECB has recourse to the national central banks ([3]) for carrying out the operations which form part of the tasks of the Eurosystem. The Eurosystem's monetary policy operations are executed under uniform terms and conditions in all Member States ([4]).

1.2. Objectives of the Eurosystem

The primary objective of the Eurosystem is to maintain price stability, as defined in Article 105 of the Treaty. Without prejudice to the primary objective of price stability, the Eurosystem has to support the general economic policies in the European Community. In pursuing its objectives, the Eurosystem has to act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources.

1.3. Eurosystem monetary policy instruments

In order to achieve its objectives, the Eurosystem has at its disposal a set of monetary policy instruments; the Eurosystem conducts open market operations, offers standing facilities and requires credit institutions to hold minimum reserves on accounts with the Eurosystem.

1.3.1. *Open market operations*

Open market operations play an important role in the monetary policy of the Eurosystem for the purposes of steering interest rates, managing the liquidity situation in the market and signalling the stance of monetary policy. Five types of instruments are available to the Eurosystem for the conduct of open market operations. The most important instrument is the *reverse transaction* (applicable on the basis of repurchase agreements or collateralised loans). The Eurosystem may also use *outright transactions*, the issuance *of debt certificates, foreign exchange swaps* and the *collection of fixed-term deposits*. Open market operations are initiated by the ECB, which also decides on the instrument to be used and on the terms and conditions for its execution. They can be executed on the basis of standard tenders, quick tenders or bilateral procedures ([5]). With regard to their aims, regularity and procedures, the Eurosystem's open market operations can be divided into the following four categories (see also Table 1):

— The *main refinancing operations* are regular liquidity-providing reverse transactions with a weekly frequency and a maturity of normally one week. These operations are executed by the national central banks on the basis of standard tenders. The main refinancing operations play a pivotal role in pursuing the purposes of the Eurosystem's open market operations and provide the bulk of refinancing to the financial sector.

([2]) It should be noted that the national central banks of those Member States which have not adopted the single currency in accordance with the Treaty establishing the European Community (Treaty) retain their powers in the field of monetary policy according to national law and are thus not involved in the conduct of the single monetary policy.

([3]) Throughout this document, the term "national central banks" refers to the national central banks of the Member States which have adopted the single currency in accordance with the Treaty.

([4]) Throughout this document, the term "Member State" refers to a Member State which has adopted the single currency in accordance with the Treaty.

([5]) The different procedures for the execution of Eurosystem open market operations, i.e. standard tenders, quick tenders and bilateral procedures, are specified in Chapter 5. *For standard tenders*, a maximum of 24 hours elapses between the tender announcement and the certification of the allotment result. All counterparties fulfilling the general eligibility criteria specified in Section 2.1 may participate in standard tenders. *Quick tenders* are executed within a time frame of 90 minutes. The Eurosystem may select a limited number of counterparties to participate in quick tenders. The term "bilateral procedures" refers to any case in which the Eurosystem conducts a transaction with one or a few counterparties without using tender procedures. Bilateral procedures include operations executed through stock exchanges or market agents.

— The *longer-term refinancing operations* are liquidity-providing reverse transactions with a monthly frequency and a maturity of normally three months. These operations are aimed at providing counterparties with additional longer-term refinancing and are executed by the national central banks on the basis of standard tenders. In these operations, the Eurosystem does not, as a rule, intend to send signals to the market and therefore normally acts as a rate taker.

— *Fine-tuning operations* are executed on an ad hoc basis with the aim of managing the liquidity situation in the market and steering interest rates, in particular in order to smooth the effects on interest rates caused by unexpected liquidity fluctuations in the market. Fine-tuning operations are primarily executed as reverse transactions, but can also take the form of outright transactions, foreign exchange swaps and the collection of fixed-term deposits. The instruments and procedures applied in the conduct of fine-tuning operations are adapted to the types of transactions and the specific objectives pursued in the operations. Fine-tuning operations are normally executed by the national central banks through quick tenders or bilateral procedures. The Governing Council of the ECB can decide whether, under exceptional circumstances, fine-tuning bilateral operations may be executed by the ECB itself.

— In addition, the Eurosystem may carry out *structural operations* through the issuance of debt certificates, reverse transactions and outright transactions. These operations are executed whenever the ECB wishes to adjust the structural position of the Eurosystem vis-à-vis the financial sector (on a regular or non-regular basis). Structural operations in the form of reverse transactions and the issuance of debt instruments are carried out by the national central banks through standard tenders. Structural operations in the form of outright transactions are executed through bilateral procedures.

1.3.2. *Standing facilities*

Standing facilities are aimed at providing and absorbing overnight liquidity, signal the general stance of monetary policy and bound overnight market interest rates. Two standing facilities are available to eligible counterparties on their own initiative, subject to their fulfilment of certain operational access conditions (see also Table 1):

— Counterparties can use the *marginal lending facility* to obtain overnight liquidity from the national central banks against eligible assets. Under normal circumstances, there are no credit limits or other restrictions on counterparties' access to the facility apart from the requirement to present sufficient underlying assets. The interest rate on the marginal lending facility normally provides a ceiling for the overnight market interest rate.

— Counterparties can use the *deposit facility* to make overnight deposits with the national central banks. Under normal circumstances, there are no deposit limits or other restrictions on counterparties' access to the facility. The interest rate on the deposit facility normally provides a floor for the overnight market interest rate.

The standing facilities are administered in a decentralised manner by the national central banks.

1.3.3. *Minimum reserves*

The Eurosystem's minimum reserve system applies to credit institutions in the euro area and primarily pursues the aims of stabilising money market interest rates and creating (or enlarging) a structural liquidity shortage. The reserve requirement of each institution is determined in relation to elements of its balance sheet. In order to pursue the aim of stabilising interest rates, the Eurosystem's minimum reserve system enables institutions to make use of averaging provisions. Compliance with the reserve requirement is determined on the basis of the institutions' average daily reserve holdings over the maintenance period. Institutions' holdings of required reserves are remunerated at the rate of the Eurosystem's main refinancing operations.

1.4. **Counterparties**

The Eurosystem's monetary policy framework is formulated with a view to ensuring the participation of a broad range of counterparties. Institutions subject to minimum reserve requirements according to Article 19.1 of the Statute of the ESCB may access the standing facilities and participate in open market operations based on standard tenders. The Eurosystem may select a limited number of counterparties to participate in fine-tuning operations. For outright transactions, no restrictions are placed a priori on the range of counterparties. For foreign exchange swaps conducted for monetary policy purposes, active players in the foreign exchange market are used. The set of counterparties for these operations is limited to those institutions selected for Eurosystem foreign exchange intervention operations which are located in the euro area.

1.5. **Underlying assets**

Pursuant to Article 18.1 of the Statute of the ESCB, all Eurosystem credit operations (i.e. liquidity-providing operations) have to be based on adequate collateral. The Eurosystem accepts a wide range of assets to underlie its operations. A distinction is made between two categories of eligible assets — "tier one" and "tier two" — essentially for purposes internal to the Eurosystem. However, this distinction will be phased out gradually over coming years to leave the Eurosystem collateral framework with a single list of eligible assets. Tier one currently consists of marketable debt instruments fulfilling uniform euro area-wide eligibility criteria specified by the ECB. Tier two consists of additional assets, marketable and non-marketable, which are of particular importance for national financial markets and banking systems and for which eligibility criteria are established by the national central banks, subject to ECB approval. No distinction is made between the two tiers with regard to the quality of the assets and their eligibility for the various types of Eurosystem monetary policy operations (except that tier two assets are normally not used by the Eurosystem in outright transactions). Eligible assets may be used on a cross-border basis, by means of the correspondent central banking model (CCBM) or through eligible links between EU securities settlement systems (SSSs), to collateralise all types of Eurosystem credit [6]. All assets eligible for Eurosystem monetary policy operations can also be used as underlying assets for intraday credit.

1.6. **Modifications to the monetary policy framework**

The Governing Council of the ECB may, at any time, change the instruments, conditions, criteria and procedures for the execution of Eurosystem monetary policy operations.

TABLE 1

Eurosystem monetary policy operations

Monetary policy operations	Types of transactions		Maturity	Frequency	Procedure
	Provision of liquidity	Absorption of liquidity			
Open market operations					
Main refinancing operations	Reverse transactions	—	One week	Weekly	Standard tenders
Longer-term refinancing operations	Reverse transactions	—	Three months	Monthly	Standard tenders
Fine-tuning operations	— Reverse transactions — Foreign exchange swaps	— Reverse transactions — Collection of fixed-term deposits — Foreign exchange swaps	Non-standardised	Non-regular	— Quick tenders — Bilateral procedures
	Outright purchases	Outright sales	—	Non-regular	Bilateral procedures
Structural operations	Reverse transactions	Issuance of debt certificates	Standardised/ non-standardised	Regular and non-regular	Standard tenders
	Outright purchases	Outright sales	—	Non-regular	Bilateral procedures
Standing facilities					
Marginal lending facility	Reverse transactions	—	Overnight	Access at the discretion of counterparties	
Deposit facility	—	Deposits	Overnight	Access at the discretion of counterparties	

(6) See Sections 6.6.1. and 6.6.2.

CHAPTER 2

2. ELIGIBLE COUNTERPARTIES

2.1. General eligibility criteria

Counterparties for Eurosystem monetary policy operations must fulfil certain eligibility criteria ([7]). These criteria are defined with a view to giving a broad range of institutions access to Eurosystem monetary policy operations, enhancing equal treatment of institutions across the euro area and ensuring that counterparties fulfil certain operational and prudential requirements:

— Only institutions subject to the Eurosystem's minimum reserve system according to Article 19.1 of the Statute of the ESCB are eligible to be counterparties. Institutions which are exempt from their obligations under the Eurosystem's minimum reserve system (see Section 7.2) are not eligible to be counterparties to Eurosystem standing facilities and open market operations.

— Counterparties must be financially sound. They should be subject to at least one form of harmonised EU/EEA supervision by national authorities ([8]). However, financially sound institutions subject to non-harmonised national supervision of a comparable standard can also be accepted as counterparties, e.g. branches established in the euro area of institutions that have their head office outside the European Economic Area (EEA).

— Counterparties must fulfil any operational criteria specified in the relevant contractual or regulatory arrangements applied by the respective national central bank (or the ECB), so as to ensure the efficient conduct of Eurosystem monetary policy operations.

These general eligibility criteria are uniform throughout the euro area. Institutions fulfilling the general eligibility criteria may:

— access the Eurosystem's standing facilities; and

— participate in Eurosystem open market operations that are based on standard tenders.

An institution may access the Eurosystem's standing facilities and open market operations based on standard tenders only through the national central bank of the Member State in which it is established. If an institution has establishments (its head office or branches) in more than one Member State, each establishment has access to these operations through the national central bank of the Member State in which it is located, notwithstanding the fact that the bids of an institution may only be submitted by one establishment (either the head office or a designated branch) in each Member State.

2.2. Selection of counterparties for quick tenders and bilateral operations

For outright transactions, no restrictions are placed a priori on the range of counterparties.

For foreign exchange swaps executed for monetary policy purposes, counterparties must be able to conduct large-volume foreign exchange operations efficiently under all market conditions. The range of counterparties to foreign exchange swaps corresponds to the counterparties located in the euro area which are selected for Eurosystem foreign exchange intervention operations. The criteria and procedures applied for the selection of counterparties to foreign exchange intervention operations are presented in Annex 3.

For other operations based on quick tenders and bilateral procedures (fine-tuning reverse transactions and the collection of fixed-term deposits), each national central bank selects a set of counterparties from among the institutions established in its Member State which fulfil the general counterparty eligibility criteria. In this respect, activity in the money market is the prime selection criterion. Other criteria which might be taken into account are, for example, the efficiency of the trading desk and the bidding potential.

([7]) For outright transactions, no restrictions are placed a priori on the range of counterparties.
([8]) Harmonised supervision of credit institutions is based on Directive 2000/12/EC of the European Parliament and of the Council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions (OJ L 126, 26.5.2000, p. 1), as amended.

In quick tenders and bilateral operations, the national central banks deal exclusively with the counterparties which are included in their respective set of fine-tuning counterparties. If, for operational reasons, a national central bank cannot deal in each operation with all of its fine-tuning counterparties, the selection of counterparties in this Member State will be based on a rotation scheme in order to ensure equitable access.

The Governing Council of the ECB can decide whether, under exceptional circumstances, fine-tuning bilateral operations may be carried out by the ECB itself. If the ECB were to carry out bilateral operations, the selection of counterparties would in such cases be made by the ECB according to a rotation scheme among those counterparties in the euro area which are eligible for quick tenders and bilateral operations in order to ensure equitable access.

2.3. Sanctions in the event of non-compliance with counterparty obligations

The ECB shall impose sanctions, in accordance with Council Regulation (EC) No 2532/98 of 23 November 1998 concerning the powers of the European Central Bank to impose sanctions ([9]), European Central Bank Regulation (EC) No 2157/1999 of 23 September 1999 on the powers of the European Central Bank to impose sanctions (ECB/1999/4) ([10]), Council Regulation (EC) No 2531/98 of 23 November 1998 concerning the application of minimum reserves by the European Central Bank ([11]), as amended, and Regulation (EC) No 1745/2003 of the European Central Bank of 12 September 2003 on the application of minimum reserves (ECB/2003/9) ([12]), on institutions which do not comply with obligations arising from ECB Regulations and Decisions relating to the application of minimum reserves. The relevant sanctions and the procedural rules for their application are specified in the abovementioned Regulations. In addition, in the case of serious infringements of the minimum reserve requirements, the Eurosystem may suspend counterparties' participation in open market operations.

In accordance with the provisions of the contractual or regulatory arrangements applied by the respective national central bank (or by the ECB), the Eurosystem can and will impose financial penalties on counterparties or suspend counterparties' participation in open market operations if counterparties fail to comply with their obligations under the contractual or regulatory arrangements applied by the national central banks (or by the ECB) as set out below.

This relates to cases of infringement of tender rules (if a counterparty is unable to transfer a sufficient amount of underlying assets to settle the amount of liquidity it has been allotted in a liquidity-providing operation or if it is unable to deliver a sufficient amount of cash to settle the amount it has been allotted in a liquidity-absorbing operation), and of bilateral transaction rules (if a counterparty is unable to deliver a sufficient amount of eligible underlying assets or if it is unable to deliver a sufficient amount of cash to settle the amount agreed in bilateral transactions).

This also applies to cases of non-compliance by a counterparty with the rules for the use of underlying assets (if a counterparty is using assets which are or have become ineligible, or which may not be used by the counterparty, e.g. owing to close links between, or the identity of, issuer/guarantor and counterparty), and to non-compliance with the rules for end-of-day procedures and access conditions for the marginal lending facility (if a counterparty which has a negative balance on the settlement account at the end of the day does not fulfil the access conditions for the marginal lending facility).

In addition, a suspension measure taken vis-à-vis a non-complying counterparty may be applied to branches of the same institution located in other Member States. Where, as an exceptional measure, this is required on account of the seriousness of a case of non-compliance, as evidenced by its frequency or duration, for instance, a counterparty may be suspended from all future monetary policy operations for a certain period of time.

Financial penalties imposed by national central banks in the event of non-compliance in relation to a breach of the rules concerning tender operations, bilateral transactions, underlying assets, end-of-day procedures or the access conditions to the marginal lending facility are calculated at a pre-specified penalty rate (as set out in Annex 6).

2.4. Suspension or exclusion on grounds of prudence

In accordance with the provisions in the contractual or regulatory arrangements applied by the respective national central bank (or by the ECB), the Eurosystem may suspend or exclude counterparties' access to monetary policy instruments on the grounds of prudence.

([9]) OJ L 318, 27.11.1998, p. 4.
([10]) OJ L 264, 12.10.1999, p. 21.
([11]) OJ L 318, 27.11.1998, p. 1.
([12]) OJ L 250, 2.10.2003, p. 10.

In addition, a suspension or exclusion of counterparties may be warranted in some of the cases which fall within the notion of the “default” of a counterparty as defined in the contractual or regulatory arrangements applied by the national central banks.

CHAPTER 3

3. OPEN MARKET OPERATIONS

Open market operations play an important role in the Eurosystem's monetary policy, pursuing the aims of steering interest rates, managing the liquidity situation in the market and signalling the stance of monetary policy. With regard to their aims, regularity and procedures, Eurosystem open market operations can be divided into four categories: main refinancing operations, longer-term refinancing operations, fine-tuning operations and structural operations. As for the instruments used, reverse transactions are the main open market instrument of the Eurosystem and can be employed in all four categories of operations, whereas debt certificates may be used for structural absorption operations. In addition, the Eurosystem has three other instruments available for the conduct of fine-tuning operations: outright transactions, foreign exchange swaps and the collection of fixed-term deposits. In the following sections, specific features of the different types of open market instruments used by the Eurosystem are presented in detail.

3.1. Reverse transactions

3.1.1. *General considerations*

(a) Type of instrument

Reverse transactions refer to operations where the Eurosystem buys or sells eligible assets under repurchase agreements or conducts credit operations against eligible assets as collateral. Reverse transactions are used for main refinancing operations and longer-term refinancing operations. In addition, the Eurosystem can use reverse transactions for structural and fine-tuning operations.

(b) Legal nature

The national central banks may execute reverse transactions either in the form of repurchase agreements (i.e. the ownership of the asset is transferred to the creditor, while the parties agree to reverse the transaction through a re-transfer of the asset to the debtor at a future point in time) or as collateralised loans (i.e. an enforceable security interest is provided over the assets but, assuming fulfilment of the debt obligation, the ownership of the asset is retained by the debtor). Further provisions for reverse transactions based on repurchase agreements are specified in the contractual arrangements applied by the respective national central bank (or the ECB). Arrangements for reverse transactions based on collateralised loans take account of the different procedures and formalities required to enable the establishment and subsequent realisation of a relevant interest in the collateral (e.g. a pledge) which apply in different jurisdictions.

(c) Interest terms

The difference between the purchase price and the repurchase price in a repurchase agreement corresponds to the interest due on the amount of money borrowed or lent over the maturity of the operation, i.e. the repurchase price includes the respective interest to be paid. The interest rate on a reverse transaction in the form of a collateralised loan is determined by applying the specified interest rate on the credit amount over the maturity of the operation. The interest rate applied to Eurosystem reverse open market operations is a simple interest rate based on the day-count convention “actual/360”.

3.1.2. *Main refinancing operations*

The main refinancing operations are the most important open market operations conducted by the Eurosystem, playing a pivotal role in pursuing the aims of steering interest rates, managing the liquidity situation in the market and signalling the stance of monetary policy. They also provide the bulk of refinancing to the financial sector.

The operational features of the main refinancing operations can be summarised as follows:

— they are liquidity-providing operations;

— they are executed regularly each week [13];

— they normally have a maturity of one week [14];

— they are executed in a decentralised manner by the national central banks;

— they are executed through standard tenders (as specified in Section 5.1);

— all counterparties fulfilling the general eligibility criteria (as specified in Section 2.1) may submit bids for the main refinancing operations; and

— both tier one and tier two assets (as specified in Chapter 6) are eligible as underlying assets for the main refinancing operations.

3.1.3. *Longer-term refinancing operations*

The Eurosystem also executes regular refinancing operations, normally with a three-month maturity, which are aimed at providing additional longer-term refinancing to the financial sector. These operations represent only a small part of the global refinancing volume. In these operations, the Eurosystem does not, as a rule, intend to send signals to the market and therefore normally acts as a rate taker. Accordingly, longer-term refinancing operations are usually executed in the form of variable rate tenders and, from time to time, the ECB indicates the operation volume to be allotted in forthcoming tenders. Under exceptional circumstances, the Eurosystem may also execute longer-term refinancing operations through fixed rate tenders.

The operational features of the longer-term refinancing operations can be summarised as follows:

— they are liquidity-providing operations;

— they are executed regularly each month [15];

— they normally have a maturity of three months [16];

— they are executed in a decentralised manner by the national central banks;

— they are executed through standard tenders (as specified in Section 5.1);

— all counterparties fulfilling the general eligibility criteria (as specified in Section 2.1) may submit bids for the longer-term refinancing operations; and

— both tier one and tier two assets (as specified in Chapter 6) are eligible as underlying assets for the longer-term refinancing operations.

3.1.4. *Fine-tuning reverse operations*

The Eurosystem can execute fine-tuning operations in the form of reverse open market transactions. Fine-tuning operations aim to manage the liquidity situation in the market and to steer interest rates, in particular in order to smooth the effects on interest rates caused by unexpected liquidity fluctuations in the market. The potential need for rapid action in the case of unexpected market developments makes it desirable to retain a high degree of flexibility in the choice of procedures and operational features in the conduct of these operations.

The operational features of the fine-tuning reverse operations can be summarised as follows:

— they can take the form of liquidity-providing or liquidity-absorbing operations;

— their frequency is not standardised;

— their maturity is not standardised;

(13) The main and the longer-term refinancing operations are executed in accordance with the Eurosystem's pre-announced tender operations calendar (see also Section 5.1.2), which can be found on the ECB's website (www.ecb.int), as well as on the Eurosystem websites (see Annex 5).
(14) The maturity of the main and the longer-term refinancing operations may occasionally vary depending on, *inter alia*, bank holidays in Member States.
(15) See footnote 13.
(16) See footnote 14.

— liquidity-providing fine-tuning reverse transactions are normally executed through quick tenders, although the possibility of using bilateral procedures is not excluded (see Chapter 5);

— liquidity-absorbing fine-tuning reverse transactions are executed, as a rule, through bilateral procedures (as specified in Section 5.2);

— these operations are normally executed in a decentralised manner by the national central banks (the Governing Council of the ECB can decide whether, under exceptional circumstances, bilateral fine-tuning reverse operations may be executed by the ECB);

— the Eurosystem may select, according to the criteria specified in Section 2.2, a limited number of counterparties to participate in fine-tuning reverse operations; and

— both tier one and tier two assets (as specified in Chapter 6) are eligible as underlying assets for fine-tuning reverse operations.

3.1.5. *Structural reverse operations*

The Eurosystem may execute structural operations in the form of reverse open market transactions aimed at adjusting the structural position of the Eurosystem vis-à-vis the financial sector.

The operational features of these operations can be summarised as follows:

— they are liquidity-providing operations;

— their frequency can be regular or non-regular;

— their maturity is not standardised a priori;

— they are executed through standard tenders (as specified in Section 5.1);

— they are executed in a decentralised manner by the national central banks;

— all counterparties fulfilling the general eligibility criteria (as specified in Section 2.1) may submit bids for structural reverse operations; and

— both tier one and tier two assets (as specified in Chapter 6) are eligible as underlying assets for structural reverse operations.

3.2. Outright transactions

(a) Type of instrument

Outright open market transactions refer to operations where the Eurosystem buys or sells eligible assets outright on the market. Such operations are executed only for structural and fine-tuning purposes.

(b) Legal nature

An outright transaction implies a full transfer of ownership from the seller to the buyer with no connected reverse transfer of ownership. The transactions are executed in accordance with the market conventions for the debt instrument used in the transaction.

(c) Price terms

In the calculation of prices, the Eurosystem acts in accordance with the most widely accepted market convention for the debt instruments used in the transaction.

(d) Other operational features

The operational features of Eurosystem outright transactions can be summarised as follows:

— they can take the form of liquidity-providing (outright purchase) or liquidity-absorbing (outright sale) operations;

— their frequency is not standardised;

— they are executed through bilateral procedures (as specified in Section 5.2);

— they are normally executed in a decentralised manner by the national central banks (the Governing Council of the ECB can decide whether, under exceptional circumstances, fine-tuning outright operations may be executed by the ECB);

— no restrictions are placed a priori on the range of counterparties to outright transactions; and

— only tier one instruments (as specified in Section 6.1) are normally used as underlying assets in outright transactions.

3.3. Issuance of ECB debt certificates

(a) Type of instrument

The ECB may issue debt certificates with the aim of adjusting the structural position of the Eurosystem vis-à-vis the financial sector so as to create (or enlarge) a liquidity shortage in the market.

(b) Legal nature

The certificates constitute a debt obligation of the ECB vis-à-vis the holder of the certificate. The certificates are issued and held in book-entry form in securities depositories in the euro area. The ECB does not impose any restrictions on the transferability of the certificates. Further provisions related to ECB debt certificates will be contained in the terms and conditions for such certificates.

(c) Interest terms

The certificates are issued at a discount, i.e. they are issued at below the nominal amount and are redeemed at maturity at the nominal amount. The difference between the issue amount and the redemption amount equals the interest accrued on the issue amount, at the agreed interest rate, over the maturity of the certificate. The interest rate applied is a simple interest rate based on the day-count convention “actual/360”. The calculation of the issue amount is shown in Box 1.

BOX 1

Issuance of ECB debt certificates

The issue amount is:

$$P_T = N \times \frac{1}{1 + \frac{r_I \times D}{36\,000}}$$

where:

N = nominal amount of the debt certificate

r_I = interest rate (as a %)

D = maturity of the debt certificate (in days)

P_T = issue amount of the debt certificate

(d) Other operational features

The operational features of the issuance of ECB debt certificates can be summarised as follows:

— the certificates are issued in order to absorb liquidity from the market;

— the certificates can be issued on a regular or non-regular basis;

— the certificates have a maturity of less than 12 months;

— the certificates are issued through standard tenders (as specified in Section 5.1);

— the certificates are tendered and settled in a decentralised manner by the national central banks; and

— all counterparties fulfilling the general eligibility criteria (as specified in Section 2.1) may submit bids for the subscription of ECB debt certificates.

3.4. Foreign exchange swaps

(a) Type of instrument

Foreign exchange swaps executed for monetary policy purposes consist of simultaneous spot and forward transactions in euro against a foreign currency. They are used for fine-tuning purposes, mainly with the aim of managing the liquidity situation in the market and steering interest rates.

(b) Legal nature

Foreign exchange swaps executed for monetary policy purposes refer to operations where the Eurosystem buys (or sells) euro spot against a foreign currency and, at the same time, sells (or buys) it back in a forward transaction at a specified repurchase date. Further provisions for foreign exchange swaps are specified in the contractual arrangement applied by the respective national central bank (or the ECB).

(c) Currency and exchange rate terms

As a rule, the Eurosystem operates only in widely traded currencies and in accordance with standard market practice. In each foreign exchange swap operation, the Eurosystem and the counterparties agree on the swap points for the transaction. The swap points are the difference between the exchange rate of the forward transaction and the exchange rate of the spot transaction. The swap points of the euro vis-à-vis the foreign currency are quoted according to general market conventions. The exchange rate terms of foreign exchange swaps are specified in Box 2.

BOX 2

Foreign exchange swaps

S = spot (on the transaction date of the foreign exchange swap) of the exchange rate between the euro (EUR) and a foreign currency ABC

$$S = \frac{x \times ABC}{1 \times EUR}$$

F_M = forward exchange rate between the euro and a foreign currency ABC on the repurchase date of the swap (M)

$$F_M = \frac{y \times ABC}{1 \times EUR}$$

Δ_M = forward points between the euro and ABC on the repurchase date of the swap (M)

$$\Delta_M = F_M - S$$

N(.) = spot amount of currency; $N(.)_M$ is the forward amount of currency:

$$N(ABC) = N(EUR) \times S \text{ or } N(EUR) = \frac{N(ABC)}{S}$$

$$N(ABC)_M = N(EUR)_M \times F_M \text{ or } N(EUR)_M = \frac{N(ABC)_M}{F_M}$$

(d) Other operational features

The operational features of foreign exchange swaps can be summarised as follows:

— they can take the form of liquidity-providing or liquidity-absorbing operations;

— their frequency is not standardised;

— their maturity is not standardised;

— they are executed through quick tenders or bilateral procedures (see Chapter 5);

— they are normally executed in a decentralised manner by the national central banks (the Governing Council of the ECB can decide whether, under exceptional circumstances, bilateral foreign exchange swaps may be executed by the ECB); and

— the Eurosystem may select, according to the criteria specified in Section 2.2 and Annex 3, a limited number of counterparties to participate in foreign exchange swaps.

3.5. Collection of fixed-term deposits

(a) Type of instrument

The Eurosystem may invite counterparties to place remunerated fixed-term deposits with the national central bank in the Member State in which the counterparty is established. The collection of fixed-term deposits is envisaged only for fine-tuning purposes in order to absorb liquidity in the market.

(b) Legal nature

The deposits accepted from counterparties are for a fixed term and with a fixed rate of interest. No collateral is given by the national central banks in exchange for the deposits.

(c) Interest terms

The interest rate applied to the deposit is a simple interest rate based on the day-count convention “actual/360”. Interest is paid at maturity of the deposit.

(d) Other operational features

The operational features of the collection of fixed-term deposits can be summarised as follows:

— the deposits are collected in order to absorb liquidity;

— the frequency with which deposits are collected is not standardised;

— the maturity of the deposits is not standardised;

— the collection of deposits is normally executed through quick tenders, although the possibility of using bilateral procedures is not excluded (see Chapter 5);

— the collection of deposits is normally executed in a decentralised manner by the national central banks (the Governing Council of the ECB can decide whether, under exceptional circumstances, the bilateral collection of fixed-term deposits ([17]) may be executed by the ECB); and

— the Eurosystem may select, according to the criteria specified in Section 2.2, a limited number of counterparties for the collection of fixed-term deposits.

([17]) Fixed-term deposits are held on accounts with the national central banks; this would be the case even if such operations were to be executed in a centralised manner by the ECB.

CHAPTER 4

4. STANDING FACILITIES

4.1. The marginal lending facility

(a) Type of instrument

Counterparties may use the marginal lending facility to obtain overnight liquidity from national central banks at a pre-specified interest rate against eligible assets (as set out in Chapter 6). The facility is intended to satisfy counterparties' temporary liquidity needs. Under normal circumstances, the interest rate on the facility provides a ceiling for the overnight market interest rate. The terms and conditions of the facility are identical throughout the euro area.

(b) Legal nature

The national central banks may provide liquidity under the marginal lending facility either in the form of overnight repurchase agreements (i.e. the ownership of the asset is transferred to the creditor, while the parties agree to reverse the transaction through a re-transfer of the asset to the debtor on the next business day) or as overnight collateralised loans (i.e. an enforceable security interest is provided over the assets but, assuming fulfilment of the debt obligation, ownership of the asset is retained by the debtor). Further provisions for repurchase agreements are specified in the contractual arrangements applied by the respective national central bank. Arrangements for providing the liquidity in the form of collateralised loans take account of the different procedures and formalities required to enable the establishment and subsequent realisation of a relevant interest in the collateral (a pledge) which apply in different jurisdictions.

(c) Access conditions

Institutions fulfilling the general counterparty eligibility criteria specified in Section 2.1 may access the marginal lending facility. Access to the marginal lending facility is granted through the national central bank in the Member State in which the institution is established. Access to the marginal lending facility is granted only on days when the relevant national real-time gross settlement (RTGS) system and the relevant SSS(s) are operational.

At the end of each business day, counterparties' intraday debit positions on their settlement account with the national central banks are automatically considered to be a request for recourse to the marginal lending facility. The procedures for end-of-day access to the marginal lending facility are specified in Section 5.3.3.

A counterparty may also be granted access to the marginal lending facility by sending a request to the national central bank in the Member State in which the counterparty is established. For the national central bank to process the request on the same day, the request must be received by the national central bank at the latest 30 minutes after the actual closing time of TARGET ([18]), ([19]). As a general rule, the closing time for the TARGET system is 6 p.m. ECB time (C.E.T.). The deadline for requesting access to the marginal lending facility is postponed by an additional 30 minutes on the last Eurosystem business day of a reserve maintenance period. In the request, the amount of credit must be stated and, if underlying assets for the transaction have not already been pre-deposited with the national central bank, the underlying assets to be delivered for the transaction must be specified.

Apart from the requirement to present sufficient underlying eligible assets, there is no limit to the amount of funds that can be advanced under the marginal lending facility.

([18]) In some Member States, the national central bank (or some of its branches) may not be open for the purpose of conducting monetary policy operations on certain Eurosystem business days owing to national or regional bank holidays. In such cases, the relevant national central bank is responsible for informing the counterparties in advance of the arrangements to be made for access to the marginal lending facility in relation to the bank holiday.

([19]) TARGET closing days are announced on the ECB's website (www.ecb.int), as well as on the Eurosystem websites (see Annex 5).

(d) Maturity and interest terms

The maturity of credit extended under the facility is overnight. For counterparties participating directly in TARGET, the credit is repaid on the next day on which the relevant national RTGS system and the relevant SSS(s) are operational, at the time at which those systems open.

The interest rate is announced in advance by the Eurosystem and is calculated as a simple interest rate based on the day-count convention "actual/360". The ECB may change the interest rate at any time, effective, at the earliest, from the following Eurosystem business day ([20]). Interest under the facility is payable with the repayment of the credit.

(e) Suspension of the facility

Access to the facility is granted only in accordance with the objectives and general monetary policy considerations of the ECB. The ECB may adapt the conditions of the facility or suspend it at any time

4.2. The deposit facility

(a) Type of instrument

Counterparties can use the deposit facility to make overnight deposits with national central banks. The deposits are remunerated at a pre-specified interest rate. Under normal circumstances, the interest rate on the facility provides a floor for the overnight market interest rate. The terms and conditions of the deposit facility are identical throughout the euro area ([21]).

(b) Legal nature

The overnight deposits accepted from counterparties are remunerated at a fixed rate of interest. No collateral is given to the counterparty in exchange for the deposits.

(c) Access conditions ([22])

Institutions fulfilling the general counterparty eligibility criteria specified in Section 2.1 may access the deposit facility. Access to the deposit facility is granted through the national central bank in the Member State in which the institution is established. Access to the deposit facility is granted only on days when the relevant national RTGS system is open.

To be granted access to the deposit facility, the counterparty must send a request to the national central bank in the Member State in which the counterparty is established. For the national central bank to process the request on the same day, the request must be received by the national central bank at the latest 30 minutes after the actual closing time of TARGET, which is, as a general rule, 6 p.m. ECB time (C.E.T.) ([23]), ([24]). The deadline for requesting access to the deposit facility is postponed by an additional 30 minutes on the last Eurosystem business day of a reserve maintenance period. In the request, the amount to be deposited under the facility is to be stated.

There is no limit to the amount a counterparty may deposit under the facility.

(d) Maturity and interest terms

The maturity of deposits under the facility is overnight. For counterparties participating directly in TARGET, deposits held under the facility mature on the next day on which the relevant national RTGS system is operational, at the time at which this system opens.

([20]) Throughout this document, the term "Eurosystem business day" refers to any day on which the ECB and at least one national central bank are open for the purpose of conducting Eurosystem monetary policy operations.

([21]) Operational differences resulting from the existence of different account structures in the national central banks may exist across euro area countries.

([22]) Owing to the existence of different account structures across the national central banks, the ECB may allow national central banks to apply access conditions which are slightly different from those referred to here. The national central banks will provide information on any such deviations from the access conditions described in this document.

([23]) In some Member States, the national central bank (or some of its branches) may not be open for the purpose of conducting Eurosystem monetary policy operations on certain Eurosystem business days owing to national or regional bank holidays. In such cases, the relevant national central bank is responsible for informing the counterparties in advance of the arrangements to be made for access to the deposit facility in relation to the bank holiday.

([24]) TARGET closing days are announced on the ECB's website (www.ecb.int), as well as on the Eurosystem websites (see Annex 5).

The interest rate is announced in advance by the Eurosystem and is calculated as a simple interest rate based on the day-count convention “actual/360”. The ECB may change the interest rate at any time, effective, at the earliest, from the following Eurosystem business day. Interest on the deposits is payable on maturity of the deposit.

(e) Suspension of the facility

Access to the facility is granted only in accordance with the objectives and general monetary policy considerations of the ECB. The ECB may adapt the conditions of the facility or suspend it at any time.

CHAPTER 5

5. PROCEDURES

5.1. Tender procedures

5.1.1. *General considerations*

Eurosystem open market operations are normally executed in the form of tender procedures. The Eurosystem’s tender procedures are performed in six operational steps, as specified in Box 3.

The Eurosystem distinguishes between two different types of tender procedures: standard tenders and quick tenders. The procedures for standard and quick tenders are identical except for the time frame and the range of counterparties.

BOX 3

Operational steps in tender procedures

Step 1 **Tender announcement**

(a) Announcement by the ECB through public wire services

(b) Announcement by the national central banks through national wire services and directly to individual counterparties (if deemed necessary)

Step 2 **Counterparties’ preparation and submission of bids**

Step 3 **Compilation of bids by the Eurosystem**

Step 4 **Tender allotment and announcement of tender results**

(a) ECB allotment decision

(b) Announcement of the allotment result

Step 5 **Certification of individual allotment results**

Step 6 **Settlement of the transactions** (see Section 5.3)

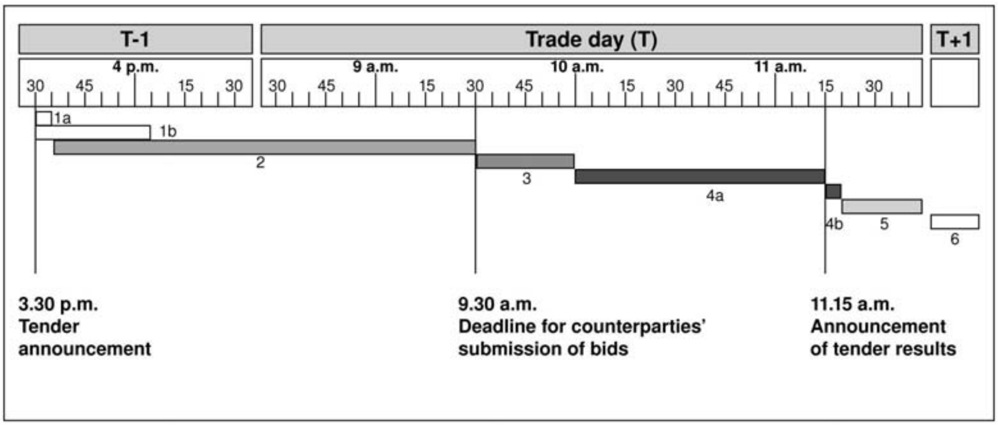
(a) Standard tenders

For standard tenders, a maximum of 24 hours elapses from the announcement of the tender to the certification of the allotment result (where the time between the submission deadline and the announcement of the allotment result is approximately two hours). Chart 1 gives an overview of the normal time frame for the operational steps for standard tenders. The ECB may decide to adjust the time frame in individual operations, if deemed appropriate.

The main refinancing operations, the longer-term refinancing operations and structural operations (with the exception of outright transactions) are always executed in the form of standard tenders. Counterparties fulfilling the general eligibility criteria specified in Section 2.1 may participate in standard tenders.

CHART 1

Normal time frame for the operational steps in standard tenders



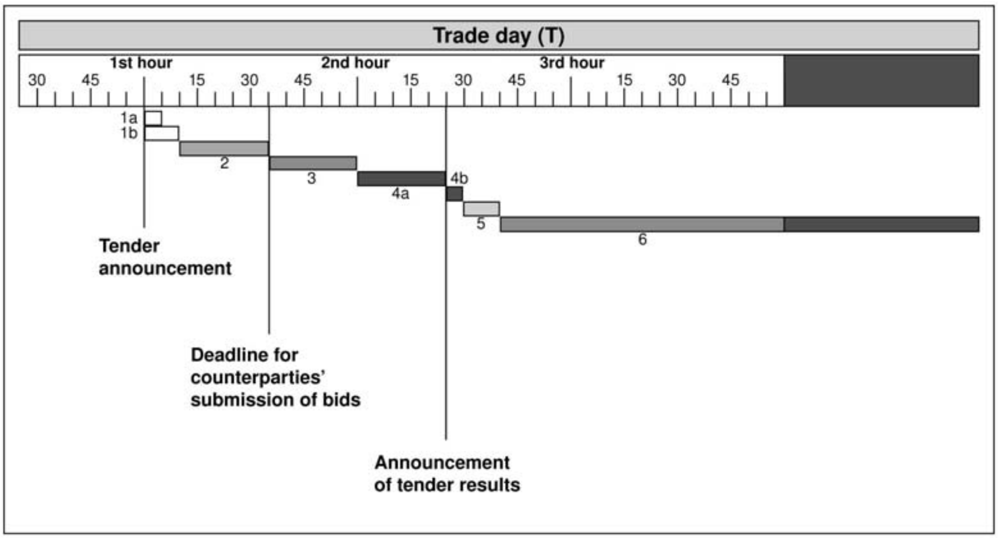
Notes: Times are given in ECB time (C.E.T.) and the figures refer to the operational steps defined in Box 3.

(b) Quick tenders

Quick tenders are normally executed within 90 minutes of the announcement of the tender, with certification taking place immediately after the announcement of the allotment result. The normal time frame for the operational steps for quick tenders is specified in Chart 2. The ECB may decide to adjust the time frame in individual operations, if deemed appropriate. Quick tenders are only used for the execution of fine-tuning operations. The Eurosystem may select, according to the criteria and procedures specified in Section 2.2, a limited number of counterparties to participate in quick tenders.

CHART 2

Normal time frame for the operational steps in quick tenders



Note: The figures refer to the operational steps defined in Box 3.

(c) Fixed rate and variable rate tenders

The Eurosystem has the option of conducting either fixed rate (volume) or variable rate (interest) tenders. In a fixed rate tender, the ECB specifies the interest rate in advance and participating counterparties bid the amount of money they want to transact at the fixed interest rate ([25]). In a variable rate tender, counterparties bid the amounts of money and the interest rates at which they want to enter into transactions with the national central banks ([26]).

5.1.2. *Tender operations calendar*

(a) Main and longer-term refinancing operations

The main and the longer-term refinancing operations are executed according to an indicative calendar published by the Eurosystem ([27]). The calendar is published at least three months before the start of the year for which it is valid. The normal trade days for the main and the longer-term refinancing operations are specified in Table 2. The ECB aims to ensure that counterparties in all Member States can participate in the main and the longer-term refinancing operations. Therefore, when compiling the calendar for these operations, the ECB makes appropriate adjustments to the normal schedule to take into account bank holidays in the individual Member States.

TABLE 2

Normal trade days for the main and the longer-term refinancing operations

Type of operation	Normal trade day (T)
Main refinancing operations	Each Tuesday
Longer-term refinancing operations	The last Wednesday of each calendar month ([1])

([1]) Owing to the Christmas period, the December operation is brought forward, normally by one week, i.e. to the preceding Wednesday of the month.

(b) Structural operations

Structural operations through standard tenders are not executed according to any pre-specified calendar. However, they are normally conducted and settled only on days which are NCB business days ([28]) in all Member States.

(c) Fine-tuning operations

Fine-tuning operations are not executed according to any pre-specified calendar. The ECB may decide to conduct fine-tuning operations on any Eurosystem business day. Only national central banks of Member States in which the trade day, the settlement day and the reimbursement day are NCB business days participate in such operations.

5.1.3. *Announcement of tender operations*

Eurosystem standard tenders are publicly announced by means of wire services. In addition, national central banks may announce the tender operation directly to counterparties without access to wire services. The public tender announcement message normally contains the following information:

— the reference number of the tender operation;

— the date of the tender operation;

— the type of operation (provision or absorption of liquidity and the type of monetary policy instrument to be used);

([25]) In fixed rate foreign exchange swap tenders, the ECB fixes the swap points of the operation and the counterparties offer the amount of currency kept fixed that they wish to sell (and buy back) or buy (and sell back) at that rate.

([26]) In variable rate foreign exchange swap tenders, the counterparties bid the amount of the currency kept fixed and the swap point quotation at which they wish to enter into the operation.

([27]) The calendar for the Eurosystem's tender operations can be found on the ECB's website (www.ecb.int), as well as on the Eurosystem websites (see Annex 5).

([28]) Throughout this document, the term "NCB business day" refers to any day on which the national central bank of a specific Member State is open for the purpose of conducting Eurosystem monetary policy operations. In some Member States, branches of the national central bank may be closed on NCB business days owing to local or regional bank holidays. In such cases, the relevant national central bank is responsible for informing the counterparties in advance of the arrangements to be made for transactions involving those branches.

— the maturity of the operation;

— the type of auction (fixed rate or variable rate tender);

— the method of allotment ("Dutch" or "American" auction, as defined in Section 5.1.5);

— the intended operation volume (normally only in the case of longer-term refinancing operations);

— the fixed tender interest rate/price/swap point (in the case of fixed rate tenders);

— the minimum/maximum accepted interest rate/price/swap point (if applicable);

— the start date and maturity date of the operation (if applicable) or the value date and maturity date of the instrument (in the case of the issuance of debt certificates);

— the currencies involved and the currency, the amount of which is kept fixed (in the case of foreign exchange swaps);

— the reference spot exchange rate to be used for the calculation of bids (in the case of foreign exchange swaps);

— the maximum bid limit (if any);

— the minimum individual allotment amount (if any);

— the minimum allotment ratio (if any);

— the time schedule for the submission of bids;

— the denomination of the certificates (in the case of the issuance of debt certificates); and

— the ISIN code of the issue (in the case of the issuance of debt certificates).

With a view to enhancing transparency in its fine-tuning operations, the Eurosystem normally announces quick tenders publicly in advance. However, under exceptional circumstances, the ECB may decide not to announce quick tenders publicly in advance. The announcement of quick tenders follows the same procedures as those for standard tenders. In a quick tender, regardless of whether it is announced publicly or not, the selected counterparties are contacted directly by the national central banks.

5.1.4. *Preparation and submission of bids by counterparties*

Counterparties' bids must be in a form that follows the pro forma example provided by the national central banks for the relevant operation. The bids must be submitted to the national central bank of a Member State in which the institution has an establishment (head office or branch). The bids of an institution may only be submitted by one establishment (either the head office or a designated branch) in each Member State.

In fixed rate tenders, counterparties must state in their bids the amount of money that they are willing to transact with the national central banks ([29]).

In variable rate tenders, counterparties may submit bids for up to ten different interest rate/price/swap point levels. In each bid, they must state the amount of money that they are willing to transact with the national central banks and the respective interest rate ([30]), ([31]). The interest rates bid must be expressed as multiples of 0,01 percentage point. In the case of a variable rate foreign exchange swap tender, the swap points must be quoted according to standard market conventions and bids must be expressed as multiples of 0,01 swap point.

([29]) In fixed rate foreign exchange swaps, the amount of the currency kept fixed that the counterparty is willing to transact with the Eurosystem must be stated.

([30]) With regard to the issuance of ECB debt certificates, the ECB may decide that bids are to be expressed in the form of a price rather than an interest rate. In such cases, prices must be quoted as a percentage of the nominal amount.

([31]) In variable rate foreign exchange swaps, the amount of the currency kept fixed that the counterparty is willing to transact with the Eurosystem and the respective swap point level must be stated.

For the main refinancing operations, the minimum bid amount is EUR 1 000 000. Bids exceeding this amount must be expressed as multiples of EUR 100 000. The same minimum bid and multiple amounts are applied in fine-tuning and structural operations. The minimum bid amount is applied to each individual interest rate/price/swap point level.

For the longer-term refinancing operations, each national central bank defines a minimum bid amount in the range from EUR 10 000 to EUR 1 000 000. Bids exceeding the defined minimum bid amount must be expressed as multiples of EUR 10 000. The minimum bid amount is applied to each individual interest rate level.

The ECB may impose a maximum bid limit in order to prevent disproportionately large bids. Any such maximum bid limit is always specified in the public tender announcement message.

Counterparties are expected always to be in a position to cover the amounts allotted to them by a sufficient amount of eligible underlying assets ([32]). The contractual or regulatory arrangements applied by the respective national central bank allow the imposition of penalties if a counterparty is unable to transfer a sufficient amount of underlying assets or cash to settle the amount it has been allotted in a tender operation.

Bids are revocable up to the tender submission deadline. Bids submitted after the deadline specified in the tender announcement message are invalid. Respect of the deadline is judged by the national central banks. The national central banks discard all the bids of a counterparty if the aggregate amount bid exceeds any maximum bid limit established by the ECB. The national central banks also discard any bid which is below the minimum bid amount or which is below any minimum or above any maximum accepted interest rate/price/swap point. Furthermore, the national central banks may discard bids which are incomplete or which do not follow the pro forma example. If a bid is discarded, the respective national central bank informs the counterparty about its decision prior to the tender allotment.

5.1.5. *Tender allotment procedures*

(a) Fixed rate tender operations

In the allotment of a fixed rate tender, the bids received from counterparties are added together. If the aggregate amount bid exceeds the total amount of liquidity to be allotted, the submitted bids will be satisfied pro rata, according to the ratio of the amount to be allotted to the aggregate amount bid (see Box 4). The amount allotted to each counterparty is rounded to the nearest euro. However, the ECB may decide to allot a minimum amount/ratio to each bidder in fixed rate tenders.

BOX 4

Allotment of fixed rate tenders

The percentage of allotment is:

$$all\% = \frac{A}{\sum_{i=1}^{n} a_i}$$

The amount allotted to the *i*th counterparty is:

$$all_i = all\% \times (a_i)$$

where:

A = total amount allotted

n = total number of counterparties

a_i = bid amount of the *i*th counterparty

all% = percentage of allotment

all_i = total amount allotted to the *i*th counterparty

([32]) Or to settle in cash in the case of liquidity-absorbing operations.

(b) Variable rate tenders in euro

In the allotment of liquidity-providing variable rate tenders in euro, bids are listed in diminishing order of offered interest rates. Bids with the highest interest rate levels are satisfied first and subsequently bids with successively lower interest rates are accepted until the total liquidity to be allotted is exhausted. If, at the lowest interest rate level accepted (i.e. the marginal interest rate), the aggregate amount bid exceeds the remaining amount to be allotted, the remaining amount is allocated pro rata among the bids according to the ratio of the remaining amount to be allotted to the total amount bid at the marginal interest rate (see Box 5). The amount allotted to each counterparty is rounded to the nearest euro.

BOX 5

Allotment of variable rate tenders in euro

(the example refers to bids quoted in the form of interest rates)

The percentage of allotment at the marginal interest rate is:

$$all\%(r_m) = \frac{A - \sum_{s=1}^{m-1} a(r_s)}{a(r_m)}$$

The allotment to the *i*th counterparty at the marginal interest rate is:

$$all(r_m)_i = all\%(r_m) \times a(r_m)_i$$

The total amount allotted to the *i*th counterparty is:

$$all_i = \sum_{s=1}^{m-1} a(r_s)_i + all(r_m)_i$$

where:

A = total amount allotted

r_s = *s*th interest rate bid by the counterparties

n = total number of counterparties

$a(r_s)_i$ = amount bid at the *s*th interest rate (r_s) by the *i*th counterparty

$a(r_s)$ = total amount bid at the *s*th interest rate (r_s)

$$a(r_s) = \sum_{i=1}^{n} a(r_s)_i$$

r_m = marginal interest rate:

$r_1 \geq r_s \geq r_m$ for a liquidity-providing tender

$r_m \geq r_s \geq r_1$ for a liquidity-absorbing tender

r_{m-1} = interest rate before the marginal interest rate (last interest rate at which bids are completely satisfied):

$r_{m-1} > r_m$ for a liquidity-providing tender

$r_m > r_{m-1}$ for a liquidity-absorbing tender

$all\%(r_m)$ = percentage of allotment at the marginal interest rate

$all\%(r_s)_i$ = allotment to the *i*th counterparty at the *s*th interest rate

all_i = total amount allotted to the *i*th counterparty

In the allotment of liquidity-absorbing variable rate tenders (which may be used for the issuance of debt certificates and the collection of fixed-term deposits), bids are listed in increasing order of offered interest rates (or diminishing order of offered prices). Bids with the lowest interest rate (highest price) levels are satisfied first and subsequently bids with successively higher interest rates (lower price bids) are accepted until the total liquidity to be absorbed is exhausted. If, at the highest interest rate (lowest price) level accepted (i.e. the marginal interest rate/price), the aggregate bid amount exceeds the remaining amount to be allotted, the remaining amount is allocated pro rata among the bids according to the ratio of the remaining amount to be allotted to the total bid amount at the marginal interest rate/price (see Box 5). For the issuance of debt certificates, the amount allotted to each counterparty is rounded to the nearest multiple of the denomination of the debt certificates. For other liquidity-absorbing operations, the amount allotted to each counterparty is rounded to the nearest euro.

The ECB may decide to allot a minimum amount to each successful bidder in variable rate tenders.

(c) Variable rate foreign exchange swap tenders

In the allotment of liquidity-providing variable rate foreign exchange swap tenders, bids are listed in increasing order of swap point quotations ([33]). The bids with the lowest swap point quotations are satisfied first and subsequently successively higher swap point quotations are accepted until the total amount of the fixed currency to be allotted is exhausted. If, at the highest swap point quotation accepted (i.e. the marginal swap point quotation), the aggregate amount bid exceeds the remaining amount to be allotted, the remaining amount is allocated pro rata among the bids according to the ratio of the remaining amount to be allotted to the total amount bid at the marginal swap point quotation (see Box 6). The amount allotted to each counterparty is rounded to the nearest euro.

BOX 6

Allotment of variable rate foreign exchange swap tenders

The percentage of allotment at the marginal swap point quotation is:

$$all\%(\Delta_m) = \frac{A - \sum_{s=1}^{m-1} a(\Delta_s)}{a(\Delta_m)}$$

The allotment to the *i*th counterparty at the marginal swap point quotation is:

$$all(\Delta_m)_i = all\%(\Delta_m) \times a(\Delta_m)_i$$

The total amount allotted to the *i*th counterparty is:

$$all_i = \sum_{s=1}^{m-1} a(\Delta_s)_i + all(\Delta_m)_i$$

where:

A = total amount allotted

Δ_s = *s*th swap point quotation bid by the counterparties

n = total number of counterparties

$a(\Delta_s)_i$ = amount bid at the *s*th swap point quotation (Δ_s) by the *i*th counterparty

([33]) Swap point quotations are listed in increasing order, taking into account the sign of the quotation, which depends on the sign of the interest rate differential between the foreign currency and the euro. If, for the maturity of the swap, the foreign currency interest rate is higher than the corresponding interest rate for the euro, the swap point quotation is positive (i.e. the euro is quoted at a premium to the foreign currency). Conversely, if the foreign currency interest rate is lower than the corresponding interest rate for the euro, the swap point quotation is negative (i.e. the euro is quoted at a discount to the foreign currency).

$a(\Delta_s)$ = total amount bid at the *s*th swap point quotation (Δ_s)

$$a(\Delta_s) = \sum_{i=1}^{n} a(\Delta_s)_i$$

Δ_m = marginal swap point quotation:

$\Delta_m \geq \Delta_s \geq \Delta_1$ for a liquidity-providing foreign exchange swap

$\Delta_1 \geq \Delta_s \geq \Delta_m$ for a liquidity-absorbing foreign exchange swap

Δ_{m-1} = swap point quotation before the marginal swap point quotation (last swap point quotation at which bids are completely satisfied):

$\Delta_m > \Delta_{m-1}$ for a liquidity-providing foreign exchange swap

$\Delta_{m-1} > \Delta_m$ for a liquidity-absorbing foreign exchange swap

$all\%(\Delta_m)$ = percentage of allotment at the marginal swap point quotation

$all(\Delta_s)_i$ = allotment to the *i*th counterparty at the *s*th swap point quotation

all_i = total amount allotted to the *i*th counterparty

In the allotment of liquidity-absorbing variable rate foreign exchange swap tenders, bids are listed in diminishing order of offered swap point quotations. The bids with the highest swap point quotations are satisfied first and subsequently successively lower swap point quotations are accepted until the total amount of the fixed currency to be absorbed is exhausted. If, at the lowest swap point quotation accepted (i.e. the marginal swap point quotation), the aggregate amount bid exceeds the remaining amount to be allotted, the remaining amount is allocated pro rata among the bids according to the ratio of the remaining amount to be allotted to the total amount bid at the marginal swap point quotation (see Box 6). The amount allotted to each counterparty is rounded to the nearest euro.

(d) Type of auction

For variable rate tenders, the Eurosystem may apply either single rate or multiple rate auction procedures. In a single rate auction (Dutch auction), the allotment interest rate/price/swap point applied for all satisfied bids is equal to the marginal interest rate/price/swap point (i.e. that at which the total allotment is exhausted). In a multiple rate auction (American auction), the allotment interest rate/price/swap point is equal to the interest rate/price/swap point offered for each individual bid.

5.1.6. *Announcement of tender results*

The results of standard and quick tenders are announced publicly by means of wire services. In addition, national central banks may announce the allotment result directly to counterparties without access to wire services. The public tender result message normally contains the following information:

— the reference number of the tender operation;

— the date of the tender operation;

— the type of operation;

— the maturity of the operation;

— the total amount bid by Eurosystem counterparties;

— the number of bidders;

— the currencies involved (in the case of foreign exchange swaps);

— the total amount allotted;

— the percentage of allotment (in the case of fixed rate tenders);

— the spot exchange rate (in the case of foreign exchange swaps);

— the marginal interest rate/price/swap point accepted and the percentage of allotment at the marginal interest rate/price/swap point (in the case of variable rate tenders);

— the minimum bid rate, maximum bid rate and weighted average allotment rate (in the case of multiple rate auctions);

— the start date and maturity date of the operation (if applicable) or the value date and maturity date of the instrument (in the case of the issuance of debt certificates);

— the minimum individual allotment amount (if any);

— the minimum allotment ratio (if any);

— the denomination of the certificates (in the case of the issuance of debt certificates); and

— the ISIN code of the issue (in the case of the issuance of debt certificates).

The national central banks will directly certify the individual allotment result to successful counterparties.

5.2. **Procedures for bilateral operations**

(a) General considerations

The national central banks may execute operations on the basis of bilateral procedures ([34]). These procedures may be used for fine-tuning open market operations and structural outright operations. They are defined in a broad sense as any procedures where the Eurosystem conducts a transaction with one or a few counterparties without a tender. In this respect, two different types of bilateral procedures can be distinguished: operations where counterparties are contacted directly by the Eurosystem, and operations executed through stock exchanges and market agents.

(b) Direct contact with counterparties

In this procedure, the national central banks directly contact one or a few domestic counterparties, which are selected according to the criteria specified in Section 2.2. According to the precise instructions given by the ECB, the national central banks decide whether to enter into a deal with the counterparties. The transactions are settled through the national central banks.

If the Governing Council of the ECB were to decide that, under exceptional circumstances, bilateral operations could also be executed by the ECB itself (or by one or a few national central banks acting as the operating arm of the ECB), the procedures for such operations would be adapted accordingly. In this case, the ECB (or the national central bank(s) acting as the operating arm of the ECB) would directly contact one or a few counterparties in the euro area, selected according to the criteria specified in Section 2.2. The ECB (or the national central bank(s) acting as the operating arm of the ECB) would decide whether to enter into a deal with the counterparties. The transactions would nevertheless be settled in a decentralised manner through the national central banks.

([34]) The Governing Council of the ECB can decide whether, under exceptional circumstances, fine-tuning bilateral operations may also be executed by the ECB itself.

Bilateral operations through direct contact with counterparties can be applied for reverse transactions, outright transactions, foreign exchange swaps and the collection of fixed-term deposits.

(c) Operations executed through stock exchanges and market agents

The national central banks can execute outright transactions through stock exchanges and market agents. For these operations, the range of counterparties is not restricted a priori and the procedures are adapted to the market conventions for the debt instruments transacted. The Governing Council of the ECB will decide whether, under exceptional circumstances, the ECB itself (or one or a few national central banks acting as the operating arm of the ECB) may execute fine-tuning outright operations through stock exchanges and market agents.

(d) Announcement of bilateral operations

Bilateral operations are normally not announced publicly in advance. In addition, the ECB may decide not to announce the results of bilateral operations publicly.

(e) Operating days

The ECB may decide to conduct fine-tuning bilateral operations on any Eurosystem business day. Only national central banks of Member States where the trade day, the settlement day and the reimbursement day are NCB business days participate in such operations.

Outright bilateral operations for structural purposes are normally only conducted and settled on days which are NCB business days in all Member States.

5.3. **Settlement procedures**

5.3.1. *General considerations*

Money transactions relating to the use of Eurosystem standing facilities or to participation in open market operations are settled on the counterparties' accounts with the national central banks (or on the accounts of settlement banks participating in the TARGET system). Money transactions are settled only after (or at the moment of) the final transfer of the assets underlying the operation. This implies that underlying assets need either to have been pre-deposited in a safe custody account at the national central banks or to be settled with said national central banks on an intraday delivery-versus-payment basis. The transfer of underlying assets is executed via the counterparties' securities settlement accounts with SSSs fulfilling the ECB's minimum standards ([35]). Counterparties without a safe custody account with a national central bank or a securities settlement account with an SSS fulfilling the ECB's minimum standards may settle the transactions of underlying assets through the securities settlement account or the safe custody account of a correspondent credit institution.

Further provisions related to the settlement procedures are defined in the contractual arrangements applied by the national central banks (or the ECB) for the specific monetary policy instruments. The settlement procedures may differ slightly between national central banks owing to differences in national law and operational practices.

5.3.2. *Settlement of open market operations*

Open market operations based on standard tenders (i.e. main refinancing operations, longer-term refinancing operations and structural operations) are normally settled on the first day following the trade day on which all relevant national RTGS systems and all relevant SSSs are open. As a matter of principle, the Eurosystem aims to

([35]) The description of the standards for the use of eligible SSSs in the euro area and an updated list of the eligible links between these systems can be found on the ECB's website (www.ecb.int).

settle the transactions related to its open market operations at the same time in all Member States with all counterparties that have provided sufficient underlying assets. However, owing to operational constraints and the technical features of SSSs, the timing within the day of the settlement of open market operations may differ across the euro area. The time of settlement of the main and the longer-term refinancing operations normally coincides with the time of reimbursement of a previous operation of corresponding maturity.

The Eurosystem aims to settle open market operations based on quick tenders and bilateral procedures on the trade day. However, the Eurosystem may, for operational reasons, occasionally apply other settlement dates for these operations, in particular for outright transactions (for fine-tuning as well as structural purposes) and foreign exchange swaps (see Table 3).

TABLE 3

Normal settlement dates for Eurosystem open market operations ([1])

Monetary policy instrument	Settlement date for operations based on standard tenders	Settlement date for operations based on quick tenders or bilateral procedures
Reverse transactions	T+1 ([2])	T
Outright transactions	—	According to market convention for the underlying assets
Issuance of debt certificates	T+1	—
Foreign exchange swaps	—	T, T+1 or T+2
Collection of fixed-term deposits	—	T

([1]) T refers to the trade day. The settlement date refers to Eurosystem business days.
([2]) If the normal settlement date for the main or the longer-term refinancing operations coincides with a bank holiday, the ECB may decide to apply a different settlement date, with the option of same-day settlement. The settlement dates for the main and the longer-term refinancing operations are specified in advance in the Eurosystem's tender operations calendar (see Section 5.1.2).

5.3.3. *End-of-day procedures*

The end-of-day procedures are specified in documentation related to the national RTGS systems and the TARGET system. As a general rule, the closing time for the TARGET system is 6 p.m. ECB time (C.E.T.). No further payment orders are accepted for processing in the national RTGS systems after the closing time, although remaining payment orders accepted before the closing time are still processed. Counterparties' requests for access to the marginal lending facility or to the deposit facility must be submitted to the respective national central bank at the latest 30 minutes after the actual closing time of the TARGET system ([36]).

Any negative balances on the settlement accounts (in the national RTGS systems) of eligible counterparties remaining after the finalisation of the end-of-day control procedures are automatically considered to be a request for recourse to the marginal lending facility (see Section 4.1).

([36]) The deadline for requesting access to the Eurosystem's standing facilities is postponed by an additional 30 minutes on the last Eurosystem business day of a minimum reserve maintenance period.

CHAPTER 6

6. ELIGIBLE ASSETS

6.1. General considerations

Article 18.1 of the Statute of the ESCB allows the ECB and the national central banks to transact in financial markets by buying and selling underlying assets outright or under repurchase agreements and requires all Eurosystem credit operations to be based on adequate collateral. Consequently, all Eurosystem liquidity-providing operations are based on underlying assets provided by the counterparties either in the form of the transfer of ownership of assets (in the case of outright transactions or repurchase agreements) or in the form of a pledge granted over relevant assets (in the case of collateralised loans) ([37]).

With the aims of protecting the Eurosystem from incurring losses in its monetary policy operations, ensuring the equal treatment of counterparties and enhancing operational efficiency, underlying assets have to fulfil certain criteria in order to be eligible for Eurosystem monetary policy operations.

At the beginning of Economic and Monetary Union, due attention had to be paid to existing differences in financial structure across Member States. A distinction was therefore made, essentially for purposes internal to the Eurosystem, between two categories of assets eligible for Eurosystem monetary policy operations. These two categories are referred to as “tier one” and “tier two” respectively:

— tier one consists of marketable debt instruments fulfilling uniform euro area-wide eligibility criteria specified by the ECB; and

— tier two consists of additional assets, marketable and non-marketable, which are of particular importance to national financial markets and banking systems and for which eligibility criteria are established by the national central banks, subject to the minimum eligibility criteria established by the ECB. The specific eligibility criteria for tier two applied by the respective national central banks are subject to approval by the ECB.

No distinction is made between the two tiers with regard to the quality of the assets and their eligibility for the various types of Eurosystem monetary policy operations (except for the fact that tier two assets are not normally used by the Eurosystem in outright transactions). The assets eligible for Eurosystem monetary policy operations can also be used as underlying assets for intraday credit.

Tier one and tier two assets are subject to the risk control measures set out in Section 6.4. Eurosystem counterparties may use eligible assets on a cross-border basis, i.e. they may obtain funds from the national central bank of the Member State in which they are established by making use of assets located in another Member State (see Section 6.6).

The Eurosystem is currently working towards introducing a single list of collateral eligible for Eurosystem credit operations (hereinafter referred to as the “single list”). The single list will be introduced gradually and will eventually replace the current two-tier system of eligible collateral. Most categories of assets currently eligible as tier two assets will be eligible in the single list. The few tier two assets that do not qualify under the eligibility criteria for the single list will be phased out gradually.

The first step towards establishing the single list included:

(a) introducing a new category of previously ineligible collateral in tier one, namely euro-denominated debt instruments issued by entities established in those Group of Ten (G10) countries that are not part of the European Economic Area (EEA);

([37]) Liquidity-absorbing outright and reverse open market operations are also based on underlying assets. For underlying assets used in liquidity-absorbing reverse open market operations, the eligibility criteria are identical to those applied for underlying assets used in liquidity-providing reverse open market operations. However, no valuation haircuts are applied in liquidity-absorbing operations.

(b) refining the standards that non-regulated markets have to comply with to be acceptable for the Eurosystem; and

(c) withdrawing equities from the tier two lists of countries that currently deem them eligible.

The forementioned changes became applicable immediately and are outlined in Sections 6.2 and 6.3. However, as they are expected to imply some modifications to the list of eligible collateral, rules for the phasing out of assets from this list have been devised. Debt instruments listed, quoted or traded on non-regulated markets, which have been assessed as not being acceptable, will continue to remain eligible until May 2007.

Further changes to implement the single list will follow at a later stage (see Box 7)

BOX 7

Further steps towards a single list of collateral

As a second step towards a single list, the Governing Council of the ECB has approved in principle the inclusion in the single list of bank loans from all euro area countries, as well as non-marketable retail mortgage-backed debt instruments, of which currently only Irish mortgage-backed promissory notes are eligible as collateral. The exact modalities for, and the timing of, the eligibility of bank loans are being finalised and will be announced in due course, once all implementation issues have been resolved.

Consistency of past and future decisions on the collateral framework by the Governing Council will be assured.

6.2. Tier one assets

The ECB establishes and maintains a list of tier one assets. This list is available to the public ([38]).

Debt certificates issued by the ECB are listed as tier one assets. Debt certificates issued by the national central banks prior to the adoption of the euro in their respective Member State are also included in the tier one list.

The following eligibility criteria are applied to other tier one assets (see also Table 4):

— They must be debt instruments having: (a) a fixed, unconditional principal amount; and (b) a coupon that cannot result in a negative cash flow. In addition, the coupon should be one of the following: (i) a zero coupon; (ii) a fixed rate coupon; or (iii) a floating rate coupon linked to an interest rate reference. The coupon may be linked to a change in the rating of the issuer itself. Furthermore, inflation-indexed bonds are also eligible. These features must be maintained until the redemption of the obligation ([39]).

([38]) This list is published and updated daily on the ECB's website (www.ecb.int).

([39]) Debt instruments affording rights to the principal and/or the interest that are subordinated to the rights of holders of other debt instruments of the same issuer (or, within a structured issue, subordinated to other tranches of the same issue) are excluded from tier one.

— They must meet high credit standards. In the assessment of the credit standard of debt instruments, the ECB takes into account, *inter alia*, available ratings by market agencies, guarantees provided by financially sound guarantors ([40]), as well as certain institutional criteria which would ensure particularly high protection of the instrument holders ([41]).

— They must be transferable in book-entry form.

— They must be deposited/registered (issued) in the EEA with a central bank or with a central securities depository (CSD) which fulfils the minimum standards established by the ECB. They must be held (settled) in the euro area through an account with the Eurosystem or with an SSS which fulfils the standards established by the ECB (so that perfection and realisation are subject to the law of a euro area country). If the CSD where the asset is issued and the SSS where it is held are not identical, then the two institutions have to be connected by a link approved by the ECB ([42]).

— They must be denominated in euro ([43]).

— They must be issued (or, alternatively, guaranteed) by entities established in the EEA ([44]). The debt instruments may also be issued by entities established in non-EEA G-10 countries ([45]). In the latter case, the debt instruments can only be considered eligible if the Eurosystem ascertains that its rights would be protected in an appropriate manner, as determined by the Eurosystem, under the laws of the respective non-EEA G-10 country. For this purpose, a legal opinion in a form and with substance acceptable to the Eurosystem will have to be submitted before the assets can be considered eligible.

([40]) Guarantors must be established in the EEA. A guarantee is deemed acceptable if the guarantor has unconditionally and irrevocably guaranteed the obligations of the issuer in relation to the payment of principal, interest and any other amounts due under the debt instruments to the holders thereof until they are discharged in full. The guarantee has to be payable on first demand (independently from the underlying debt obligation). Guarantees given by public entities entitled to levy taxes should either be payable on first demand or otherwise provide for prompt and punctual payment following default. The obligations of the guarantor under the guarantee need to rank at least equally and rateably (*pari passu*) with all other unsecured obligations of the guarantor. The guarantee must be governed by the law of an EU Member State and be legally valid, binding and enforceable against the guarantor. A legal confirmation concerning the legal validity, binding effect and enforceability of the guarantee will have to be submitted in a form and with substance acceptable to the Eurosystem before the asset supported by the guarantee can be considered eligible. If the guarantor is established in a jurisdiction other than the one of the law governing the guarantee, the legal confirmation shall also confirm that the guarantee is valid and enforceable under the law governing the establishment of the guarantor. The legal confirmation should be submitted for review to the national central bank that is reporting a certain asset supported by a guarantee for inclusion in the list of eligible assets. The national central bank reporting a certain asset is normally the national central bank of the country in which the asset will be listed, traded or quoted. In the event of multiple listings, any queries should be addressed to the ECB's Eligible Assets Hotline (Eligible-Assets.hotline@ecb.int). The need for a legal confirmation does not apply to guarantees given in respect of debt instruments with an individual asset rating or to guarantees given by public entities entitled to levy taxes. The requirement of enforceability is subject to any insolvency or bankruptcy laws, general principles of equity and other similar laws and principles applicable to the guarantor and generally affecting creditors' rights against the guarantor.

([41]) Debt instruments issued by credit institutions that comply strictly with the criteria set out in Article 22(4) of Council Directive 85/611/EEC of 20 December 1985 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) (OJ L 375, 31.12.1985, p. 3), as amended by Directive 88/220/EEC (OJ L 100, 19.4.1988, p. 31). Directive 2001/107/EC of the European Parliament and of the Council (OJ L 41, 13.2.2002, p. 20), and Directive 2001/108/EC of the European Parliament and of the Council (OJ L 41, 13.2.2002, p. 35), are eligible in tier one.

([42]) The description of the standards for the use of eligible SSSs in the euro area and an updated list of the eligible links between these systems can be found on the ECB's website (www.ecb.int).

([43]) Expressed as such or in the national denominations of the euro.

([44]) The requirement that the issuing entity be established in the EEA or in non-EEA G10 countries does not apply to international and supranational institutions.

([45]) Non-EEA G10 countries currently include the United States, Canada, Japan and Switzerland.

— They must be listed or quoted on a regulated market as defined in Directive 2004/39/EC of the European Parliament and of the Council [46], on markets in financial instruments or listed, quoted or traded on certain non-regulated markets as specified by the ECB [47]. The assessment of non-regulated markets by the Eurosystem is based on three principles — safety, transparency and accessibility [48]. Furthermore, market liquidity may be taken into account by the ECB when determining the eligibility of individual debt instruments.

In spite of their inclusion in the tier one list, a counterparty may not submit as underlying assets any debt instruments issued or guaranteed by that counterparty, or by any other entity with which the counterparty has close links [49], [50], [51].

In spite of their inclusion in the tier one list, national central banks may decide not to accept the following instruments as underlying assets:

— debt instruments falling due for repayment before the maturity date of the monetary policy operation for which they are being used as underlying assets [52]; and

— debt instruments with an income flow (e.g. a coupon payment) occurring in the period up to the maturity date of the monetary policy operation for which they are being used as underlying assets.

All tier one assets must be usable in a cross-border context in the whole euro area. This implies that all Eurosystem counterparties must be able to use such assets either through links with their domestic SSSs or through other eligible arrangements to receive credit from the national central bank of the Member State in which the counterparty is established (see Section 6.6).

Tier one assets are eligible for all monetary policy operations which are based on underlying assets, i.e. reverse and outright open market transactions and the marginal lending facility.

([46]) OJ L 145, 30.4.2004, p. 1.

([47]) Debt instruments issued by credit institutions that do not comply strictly with the criteria set out in Article 22(4) of Directive 85/611/EEC, as amended, are accepted in tier one only if they are listed or quoted on a regulated market as defined in Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC.

([48]) "Safety", "transparency" and "accessibility" are defined by the Eurosystem exclusively in terms of the performance of the Eurosystem's collateral management function. The selection process is not aimed at assessing the intrinsic quality of the various markets. The principles are to be understood as follows: *Safety* is taken to mean certainty with regard to transactions, in particular certainty on the validity and enforceability of transactions. *Transparency* is taken to mean unimpeded access to information on the market's rules of procedures and operation, the financial features of the assets, the price formation mechanism, and the relevant prices and quantities (quotes, interest rates, trading volumes, outstanding amounts, etc.). *Accessibility* refers to the Eurosystem's ability to take part in and have access to the market; a market is accessible for collateral management purposes if its rules of procedures and operation allow the Eurosystem to obtain information and conduct transactions when needed for these purposes. The Eurosystem intends to reassess the list of non-regulated markets and publish the list of acceptable ones on the ECB's website (www.ecb.int) at least once a year.

([49]) In the event of a counterparty using assets that, owing to an identity with the issuer/guarantor or the existence of close links, it may not or no longer use to secure an outstanding credit, it is obliged to immediately notify the relevant national central bank thereof. The assets are valued at zero on the next valuation date and a margin call may be triggered (see also Annex 6). In addition, the counterparty has to remove the asset on the earliest possible date.

([50]) Close links means a situation in which the counterparty is linked to an issuer of debt instruments by reason of the fact that:

(i) the counterparty owns 20 % or more of the capital of the issuer, or one or more undertakings in which the counterparty owns the majority of the capital own 20 % or more of the capital of the issuer, or the counterparty and one or more undertakings in which the counterparty owns the majority of the capital together own 20 %or more of the capital of the issuer; or

(ii) the issuer owns 20 % or more of the capital of the counterparty, or one or more undertakings in which the issuer owns the majority of the capital own 20 % or more of the capital of the counterparty, or the issuer and one or more undertakings in which the issuer owns the majority of the capital together own 20 % or more of the capital of the counterparty; or

(iii) a third party owns both the majority of the capital of the counterparty and the majority of the capital of the issuer, either directly or indirectly, through one or more undertakings in which that third party owns the majority of the capital.

([51]) This provision does not apply to: (i) close links between the counterparty and the public authorities of EEA countries (including the case where the public authority is a guarantor of the issuer); (ii) trade bills, for which at least one entity (other than a credit institution) is liable in addition to the counterparty; (iii) debt instruments which comply strictly with the criteria set out in Article 22(4) of Directive 85/611/EEC, as amended; or (iv) cases in which debt instruments are protected by specific legal safeguards comparable with (iii).

([52]) If the national central banks were to allow the use of instruments with a maturity shorter than the monetary policy operations for which they serve as underlying assets, counterparties would be required to replace such assets at, or prior to, maturity.

6.3. Tier two assets

In addition to debt instruments fulfilling the eligibility criteria for tier one, national central banks may consider, as eligible other assets, tier two assets which are of particular importance to their national financial markets and banking systems. Eligibility criteria for tier two assets are established by the national central banks in accordance with the minimum eligibility criteria stated below. The specific national eligibility criteria for tier two assets are subject to approval by the ECB. The national central banks establish and maintain national lists of eligible tier two assets. These lists are available to the public ([53]).

Tier two assets have to fulfil the following minimum eligibility criteria (see also Table 4):

— They can be debt instruments (marketable or non-marketable) having: (a) a fixed, unconditional principal amount; and (b) a coupon that cannot result in a negative cash flow. In addition, the coupon should be one of the following: (i) a zero coupon; (ii) a fixed rate coupon; or (iii) a floating rate coupon linked to an interest rate reference. The coupon may be linked to a change in the rating of the issuer itself. Furthermore, inflation-indexed bonds are also eligible. These features must be maintained until the redemption of the obligation.

TABLE 4

Eligible assets for Eurosystem monetary policy operations

Criteria	Tier one	Tier two
Type of asset	— ECB debt certificates — Other marketable debt instruments ([1]), ([2])	— Marketable debt instruments ([1]) — Non-marketable debt instruments ([1])
Settlement procedures	Instruments must be centrally deposited in book-entry form with national central banks or an SSS fulfilling the ECB's minimum standards	Assets must be easily accessible to the national central bank which has included them in its tier two list
Type of issuer	— Central banks — Public sector — Private sector ([3]) — International and supranational institutions	— Public sector — Private sector ([4])
Credit standard	The asset must be deemed of high credit quality by the ECB (which could include an eligible guarantee of an EEA guarantor which is deemed financially sound by the ECB)	The asset must be deemed of high credit quality by the national central bank which has included it in its tier two list (which could include an eligible guarantee of a euro area guarantor which is deemed financially sound by the national central bank which has included the asset in its tier two list)
Place of establishment of the issuer	EEA and non-EEA G10 countries ([5])	Euro area
Place of establishment of the guarantor	EEA	Euro area
Location of asset	— Place of issue: EEA — Place of settlement: euro area ([6])	Euro area ([6])

([53]) These lists are published and updated daily on the ECB's website (www.ecb.int). For non-marketable tier two assets and debt instruments with restricted liquidity and special features, national central banks may decide not to disclose information on individual issues, issuers/debtors or guarantors in the publication of their national tier two lists, but must offer alternative information to ensure that counterparties throughout the euro area can easily ascertain the eligibility of a specific asset.

Criteria	Tier one	Tier two
Currency	Euro [7]	Euro [7]
Cross-border use	Yes	Yes

([1]) They must have both: (a) a fixed, unconditional principal amount; and (b) a coupon that cannot result in a negative cash flow. In addition, the coupon should be one of the following: (i) a zero coupon; (ii) a fixed rate coupon; or (iii) a floating rate coupon linked to an interest rate reference. The coupon may be linked to a change in the rating of the issuer itself. Furthermore, inflation-indexed bonds are eligible. These features must be maintained until the redemption of the obligation.

([2]) Debt instruments affording rights to the principal and/or the interest that are subordinated to the rights of holders of other debt instruments of the same issuer (or, within a structured issue, subordinated to other tranches of the same issue) are excluded from tier one.

([3]) Debt instruments issued by credit institutions which comply strictly with the criteria set out in Article 22(4) of Directive 85/611/EEC, as amended, are eligible in tier one. Debt instruments issued by credit institutions which do not comply strictly with such criteria may be accepted in tier one only if they are listed or quoted on a regulated market as defined in Directive 2004/39/EC.

([4]) Debt instruments issued by credit institutions which do not comply strictly with the criteria set out in Article 22(4) of Directive 85/611/EEC, as amended, are normally not eligible for inclusion in tier two lists. However, the ECB may authorise national central banks to include such assets in their tier two lists subject to certain conditions and restrictions.

([5]) The requirement that the issuing entity be established in the EEA or in non-EEA G10 countries does not apply to international and supranational institutions.

([6]) So that perfection and realisation are subject to the law of a Member State of the euro area.

([7]) Expressed as such or in the national denominations of the euro.

— They must be debt obligations against (or be guaranteed by) ([54]) entities which are deemed to be financially sound by the national central bank which has included the assets in its tier two list. They must be easily accessible to the national central bank which has included the assets in its tier two list.

— They must be located in the euro area (so that perfection and realisation are subject to the law of a euro area country).

— They must be denominated in euro ([55]).

— They must be issued (or, alternatively, guaranteed) by entities established in the euro area.

In spite of their inclusion in the tier two lists, a counterparty may not submit as underlying assets any debt obligations against that counterparty, or any other entity with which the counterparty has close links ([56]), ([57]), ([58]).

In spite of their inclusion in the tier two lists, national central banks may decide not to accept the following assets as underlying assets:

— debt instruments falling due for repayment before the maturity date of the monetary policy operation for which they are used as underlying assets ([59]); or

— debt instruments with an income flow (e.g. a coupon payment) occurring in the period up to the maturity date of the monetary policy operation for which they are being used as underlying assets.

([54]) Guarantors must be established in the euro area. For the remaining conditions see footnote 40.

([55]) Expressed as such or in the national denominations of the euro.

([56]) See footnote 49.

([57]) See footnote 50.

([58]) See footnote 51.

([59]) See footnote 52.

All tier two assets must be usable in a cross-border context in the whole euro area. This implies that all Eurosystem counterparties must be able to use such assets either through links with their domestic SSS or through other eligible arrangements to receive funds from the national central bank of the Member State in which the counterparty is established (see Section 6.6).

Tier two assets are eligible for reverse open market transactions and the marginal lending facility. They are not normally used in Eurosystem outright transactions.

6.4. Risk control measures

Risk control measures are applied to the assets underlying Eurosystem monetary policy operations in order to protect the Eurosystem against the risk of financial loss if underlying assets have to be realised owing to the default of a counterparty. The risk control measures at the disposal of the Eurosystem are described in Box 8.

BOX 8

Risk control measures

The Eurosystem currently applies the following risk control measures:

— **Valuation haircuts**

The Eurosystem applies "valuation haircuts" in the valuation of underlying assets. This implies that the value of the underlying asset is calculated as the market value of the asset less a certain percentage (haircut).

— **Variation margins (marking to market)**

The Eurosystem requires the haircut-adjusted market value of the underlying assets used in its liquidity-providing reverse transactions to be maintained over time. This implies that if the value, measured on a regular basis, of the underlying assets falls below a certain level, the national central bank will require the counterparty to supply additional assets or cash (i.e. a margin call). Similarly, if the value of the underlying assets, following their revaluation, exceeds a certain level, the counterparty may retrieve the excess assets or cash. (The calculations relevant for the execution of margin calls are presented in Box 12.)

The following risk control measures are currently not applied by the Eurosystem:

— **Initial margins**

The Eurosystem may apply initial margins in its liquidity-providing reverse transactions. This would imply that counterparties would need to provide underlying assets with a value at least equal to the liquidity provided by the Eurosystem plus the value of the initial margin.

— **Limits in relation to issuers/debtors or guarantors**

The Eurosystem may apply limits to the exposure vis-à-vis issuers/debtors or guarantors.

— **Additional guarantees**

The Eurosystem may require additional guarantees from financially sound entities in order to accept certain assets.

— **Exclusion**

The Eurosystem may exclude certain assets from use in its monetary policy operations.

6.4.1. *Risk control measures for tier one assets*

The Eurosystem applies specific risk control measures according to the types of underlying assets offered by the counterparty. The appropriate risk control measures for tier one assets are determined by the ECB. Risk control measures for tier one assets are broadly harmonised across the euro area ([60]). The risk control framework for tier one assets includes the following main elements:

— Eligible tier one assets are allocated to one of four categories of decreasing liquidity, based on issuer classification and asset type. The allocation of eligible assets to the four liquidity categories is described in Box 9.

BOX 9

Liquidity categories for tier one assets ([1])

Category I	**Category II**	**Category III**	**Category IV**
Central government debt instruments	Local and regional government debt instruments	Traditional Pfandbrief-style debt instruments	Asset-backed securities ([2])
Debt instruments issued by central banks ([3])	Jumbo Pfandbrief-style debt instruments ([4])	Credit institution debt instruments	
	Agency debt instruments ([5])	Debt instruments issued by corporate and other issuers ([5])	
	Supranational debt instruments		

([1]) In general, the issuer classification determines the liquidity category. However, all asset-backed securities are included in category IV, regardless of the classification of the issuer, and Jumbo Pfandbrief-style debt instruments are included in category II, in contrast to other debt instruments issued by credit institutions which are included in category III.

([2]) Asset-backed securities fall into liquidity category IV regardless of the issuer classification.

([3]) Debt certificates issued by the ECB and debt instruments issued by the national central banks prior to the adoption of the euro in their respective Member State are included in liquidity category I.

([4]) Only instruments with an issuing volume of at least EUR 500 million, for which at least two market makers provide regular bid and ask quotes, fall into the asset class of Jumbo Pfandbrief-style instruments.

([5]) Only securities issued by issuers that have been classified as agencies by the ECB are included in liquidity category II. Securities issued by other agencies are included in liquidity category III.

([60]) Owing to operational differences across Member States in respect of the procedures for counterparties' delivery of underlying assets to the national central banks (in the form of a pool of collateral pledged with the national central bank or as repurchase agreements based on individual assets specified for each transaction), minor differences may occur with regard to the timing of the valuation and other operational features of the risk control framework.

— Individual debt instruments are subject to specific "valuation haircuts". The haircuts are applied by deducting a certain percentage from the market value of the underlying asset. The haircuts differ according to the residual maturity and coupon structure of the debt instruments as described in Boxes 10 and 11.

BOX 10

Level of valuation haircuts (%) applied to eligible tier one assets in relation to fixed coupon and zero coupon instruments

Liquidity categories

	Category I		**Category II**		**Category III**		**Category IV**	
Residual maturity (years)	fixed coupon	zero coupon	fixed coupon	zero coupon	fixed coupon	zero coupon	fixed coupon	zero coupon
0–1	0,5	0,5	1	1	1,5	1,5	2	2
1–3	1,5	1,5	2,5	2,5	3	3	3,5	3,5
3–5	2,5	3	3,5	4	4,5	5	5,5	6
5–7	3	3,5	4,5	5	5,5	6	6,5	7
7–10	4	4,5	5,5	6,5	6,5	8	8	10
> 10	5,5	8,5	7,5	12	9	15	12	18

— The valuation haircuts applied to all tier one fixed coupon and zero coupon instruments are described in Box 10 ([61]).

— The valuation haircuts applied to all tier one inverse floating rate instruments are the same for all liquidity classes and are described in Box 11.

BOX 11

Level of valuation haircuts (%) applied to eligible tier one inverse floating rate instruments

Residual maturity (years)	**Inverse floaters coupon**
0–1	2
1–3	7
3–5	10
5–7	12
7–10	17
> 10	25

— The haircut applied to debt instruments with variable rate coupons ([62]) is that applied to the zero-to-one-year maturity bucket of fixed coupon instruments in the liquidity category to which the instrument is assigned.

([61]) The valuation haircut levels applied to fixed coupon securities are also applicable to debt instruments, the coupon of which is linked to a change in the rating of the issuer itself or to inflation-indexed bonds.

([62]) A coupon payment is considered a variable rate payment if the coupon is linked to a reference interest rate and if the resetting period corresponding to this coupon is no longer than one year. Coupon payments for which the resetting period is longer than one year are treated as fixed rate payments, with the relevant maturity for the haircut being the residual maturity of the debt instrument.

— The risk control measures applied to a debt instrument with more than one type of coupon payment depend only on the coupon payments during the remaining life of the instrument. The valuation haircut applied to such an instrument is set equal to the highest of the haircuts applicable to debt instruments with the same residual maturity, and coupon payments of any one of the types occurring in the remaining life of the instrument are considered.

— No valuation haircuts are applied in liquidity-absorbing operations.

— Depending on both the jurisdiction and national operational systems, national central banks allow for the pooling of underlying assets and/or require the earmarking of the assets used in each individual transaction. In pooling systems, the counterparty makes a pool of sufficient underlying assets available to the central bank to cover the related credits received from the central bank, thus implying that individual assets are not linked to specific credit operations. By contrast, in an earmarking system, each credit operation is linked to specific identifiable assets.

— The assets are subject to daily valuation. On a daily basis, national central banks calculate the required value of underlying assets taking into account changes in outstanding credit volumes, the valuation principles outlined in Section 6.5 and the required valuation haircuts.

— If, after valuation, the underlying assets do not match the requirements as calculated on that day, symmetric margin calls are performed. In order to reduce the frequency of margin calls, national central banks may apply a trigger point. If applied, this trigger point is 0,5 % of the amount of liquidity provided. Depending on the jurisdiction, national central banks may require margin calls to be effected either through the supply of additional assets or by means of cash payments. This implies that if the market value of the underlying assets falls below the lower trigger point, counterparties have to supply additional assets (or cash). Similarly, if the market value of the underlying assets, following their revaluation, were to exceed the upper trigger point, the national central bank would return the excess assets (or cash) to the counterparty (see Box 12).

BOX 12

Calculation of margin calls

The total amount of eligible assets J (for $j = 1$ to J; value $C_{j,t}$ at time t) a counterparty must provide for a set of liquidity-providing operations I (for $i = 1$ to I; amount $L_{i,t}$ at time t) is determined by the following formula:

$$\sum_{i=1}^{I} L_{i,t} \leq \sum_{j=1}^{J} (1 - h_j)\, C_{j,t} \qquad (1)$$

where:

h_j is the valuation haircut applied to eligible asset j.

If τ is the time period between revaluations, the margin call base at time $t+\tau$ equals:

$$M_{t+\tau} = \sum_{i=1}^{I} L_{i,t+\tau} - \sum_{j=1}^{J} (1 - h_j)\, C_{j,t+\tau} \qquad (2)$$

Depending on the operational features of the national central banks' collateral management systems, national central banks may also take into account interest accrued on liquidity provided in outstanding operations in the calculation of the margin call base.

Margin calls are effected only if the margin call base exceeds a certain trigger point level.

Let $k = 0,5$ % denote the trigger. In an earmarking system (I=1), a margin call is effected when:

$M_{t+\tau} > k \cdot L_{i,t+\tau}$ (the counterparty pays the margin call to the national central bank); or

$M_{t+\tau} < -k \cdot L_{i,t+\tau}$ (the national central bank pays the margin call to the counterparty).

In a pooling system, the counterparty has to bring more assets into the pool if:

$$M_{t+\tau} > k \cdot \sum_{i=1}^{I} L_{i,t+\tau}$$

Conversely, the amount of intraday credit *(IDC)* available to the counterparty in a pooling system can be expressed as follows:

$$IDC = -M_{t+\tau} + k \cdot \sum_{i=1}^{I} L_{i,t+\tau} \text{ (if positive)}$$

In both earmarking and pooling systems, margin calls ensure that the relation expressed in (1) above is re-established.

— In pooling systems counterparties may substitute underlying assets on a daily basis.

— In earmarking systems the substitution of underlying assets may be permitted by national central banks.

— The ECB may at any time decide to remove individual debt instruments from the list of eligible tier one instruments [63].

6.4.2. *Risk control measures for tier two assets*

The appropriate risk control measures for tier two assets are compiled by the national central bank which has included the asset in its tier two list. The application of risk control measures by national central banks is subject to ECB approval. The Eurosystem aims to ensure non-discriminatory conditions for tier two assets across the euro area when establishing the appropriate risk control measures. Within this framework, the valuation haircuts applied to tier two assets reflect the specific risks associated with these assets and are at least as stringent as the valuation haircuts applied to tier one assets. Tier two assets are classified in three different haircut groups, reflecting differences in their intrinsic financial characteristics and in their liquidity. The liquidity groups and valuation haircuts for tier two assets are described in Box 13.

BOX 13

Level of valuation haircuts (%) applied to eligible tier two assets

1. **Valuation haircuts (%) applied to marketable debt instruments with limited liquidity** [1]:

Residual maturity (years)	Fixed coupon	Zero coupon
0–1	2	2
1–3	3,5	3,5
3–5	5,5	6
5–7	6,5	7
7–10	8	10
>10	12	18

Valuation haircuts applied to tier two inverse floating rate instruments:

The valuation haircuts applied to all tier two inverse floating rate instruments are identical to those applied to tier one inverse floatingrate instruments.

[63] If, at the time of exclusion from the tier one list, a debt instrument is being used in a Eurosystem credit operation, it will have to be removed as soon as possible.

2. **Valuation haircuts (%) applied to debt instruments with restricted liquidity and special features:**

Residual maturity (years)	Fixed coupon	Zero coupon
0–1	4	4
1–3	8	8
3–5	15	16
5–7	17	18
7–10	22	23
>10	24	25

3. **Valuation haircuts applied to non-marketable debt instruments:**

Trade bills: 4 % for instruments with a residual maturity of up to six months.

Bank loans: 12 % for loans with a residual maturity of up to six months; and 22 % for loans with a residual maturity between six months and two years.

Mortgage-backed promissory notes: 22 %.

(1) It should be recalled that, although debt instruments issued by credit institutions which do not comply strictly with the criteria set out in Article 22(4) of Directive 85/611/EEC, as amended, are normally not eligible for inclusion in tier two lists, the ECB may authorisenational central banks to include such assets in their tier two lists subject to certain conditions and restrictions. For such instruments, a 10 % add-on to the tier two haircut is applied.

The inclusion of tier two assets in one of the following liquidity groups is proposed by national central banks and is subject to the ECB's approval:

1. Marketable debt instruments with limited liquidity:

the majority of the tier two assets fall into this category. Although there may be some differences in the degree of liquidity, the assets are, in general, similar in that they have a small secondary market, prices may not be quoted daily and normal size trades can generate price effects.

2. Debt instruments with restricted liquidity and special features:

these are assets which, while enjoying some aspects of marketability, require extra time to be liquidated in the market. This is the case for assets which are generally non-marketable but which have special features that introduce some marketability, including market auction procedures (if there is a need to liquidate the assets) and a daily price valuation.

3. Non-marketable debt instruments:

these instruments are non-marketable in practice and therefore have little or no liquidity.

For tier two assets with variable rate coupons and debt instruments with more than one type of coupon payment, the same rules apply as for tier one assets, unless otherwise determined by the ECB [64].

The national central banks apply the same trigger point (if applicable) for the execution of margin calls for tier two assets as for tier one assets. In addition, national central banks may apply limits to their acceptance of tier two assets, may require additional guarantees and may decide at any time to remove individual assets from their tier two lists.

(64) For some tier two assets with interest rate resetting features, in which the resetting is done in an unequivocal and clear manner following market standards and subject to the ECB's approval, the relevant maturity is that given by the resetting maturity.

6.5. Valuation principles for underlying assets

When determining the value of underlying assets used in reverse transactions, the Eurosystem applies the following principles:

— For each marketable asset eligible in tier one or tier two, the Eurosystem specifies a single reference price source. This also implies that for assets listed, quoted or traded on more than one market, only one of these markets is used as a price source for the relevant asset.

— For each reference market, the Eurosystem defines the most representative price to be used for the calculation of market values. If more than one price is quoted, the lowest of these prices (normally the bid price) is used.

— The value of marketable assets is calculated on the basis of the most representative price on the business day preceding the valuation date.

— In the absence of a representative price for a particular asset on the business day preceding the valuation date, the last trading price is used. If no trading price is available, the national central bank will define a price, taking into account the last price identified for the asset in the reference market.

— The market value of a debt instrument is calculated as including accrued interest.

— Depending on differences in national legal systems and operational practices, the treatment of income flows (e.g. coupon payments) related to an asset which are received during the life of a reverse transaction may differ between national central banks. If the income flow is transferred to the counterparty, national central banks ensure that the relevant operations will still be fully covered by a sufficient amount of underlying assets before the transfer of the income takes place. The national central banks aim to ensure that the economic effect of the treatment of income flows is equivalent to a situation in which the income is transferred to the counterparty on the payment day ([65]).

— For non-marketable tier two assets, the national central bank which has included the assets in its tier two list specifies separate valuation principles.

6.6. Cross-border use of eligible assets

Eurosystem counterparties may use eligible assets on a cross-border basis, i.e. they may obtain funds from the national central bank of the Member State in which they are established by making use of assets located in another Member State. Underlying assets must be usable on a cross-border basis in the whole euro area for the settlement of all types of operations in which the Eurosystem provides liquidity against eligible assets.

A mechanism has been developed by the national central banks (and by the ECB) to ensure that all eligible assets issued/deposited in the euro area may be used on a cross-border basis. This is the correspondent central banking model (CCBM), under which national central banks act as custodians ("correspondents") for each other (and for the ECB) in respect of assets accepted in their local depository or settlement system. Specific solutions may be used for non-marketable assets or tier two assets with restricted liquidity and special features which cannot be transferred through an SSS ([66]). The CCBM may be used to collateralise all kinds of Eurosystem credit operations. In addition to the CCBM, eligible links between SSSs can be used for the cross-border transfer of securities ([67]).

([65]) National central banks may decide not to accept debt instruments with an income flow (e.g. a coupon payment) occurring in the period up to the maturity date of the monetary policy operation as underlying assets in reverse transactions (see Sections 6.2 and 6.3).

([66]) Details are provided in the "Correspondent Central Banking Model brochure", which is available on the ECB's website (www.ecb.int).

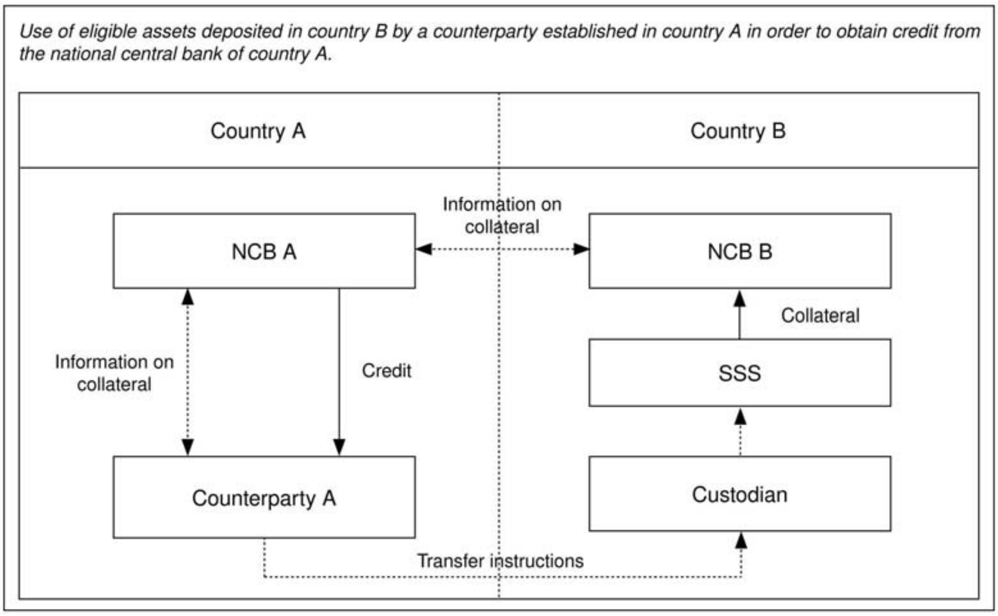
([67]) Eligible assets may be used through an account of a central bank in an SSS located in a country other than that of the central bank in question if the Eurosystem has approved the use of such an account. Since August 2000, the Central Bank and Financial Services Authority of Ireland has been authorised to open such an account in Euroclear. This account can be used for all eligible assets held in Euroclear, i.e. including eligible assets transferred to Euroclear through eligible links.

6.6.1. *Correspondent central banking model*

The correspondent central banking model is illustrated in Chart 3 below.

CHART 3

The correspondent central banking model



All national central banks maintain securities accounts with each other for the purpose of the cross-border use of eligible assets. The precise procedure of the CCBM depends on whether the eligible assets are earmarked for each individual transaction or whether they are held in a pool of underlying assets ([68]).

— In an earmarking system, as soon as its bid for credit is accepted by the national central bank of the Member State in which the counterparty is established (i.e. the "home central bank"), the counterparty instructs (via its own custodian, if necessary) the SSS in the country in which its securities are held to transfer them to the central bank of that country for the account of the home central bank. Once the home central bank has been informed by the correspondent central bank that the collateral has been received, it transfers the funds to the counterparty. Central banks do not advance funds until they are certain that the counterparties' securities have been received by the correspondent central bank. Where necessary to meet settlement deadlines, counterparties may be able to pre-deposit assets with correspondent central banks for the account of their home central bank using the CCBM procedures.

— In a pooling system, the counterparty is able at any time to provide the correspondent central bank with securities for the account of the home central bank. Once the home central bank has been informed by the correspondent central bank that the securities have been received, it will add these securities to the pool account of the counterparty.

The CCBM is available to counterparties from 9 a.m. to 4 p.m. ECB time (C.E.T.) on each Eurosystem business day. A counterparty wishing to make use of the CCBM must advise the national central bank from which it wishes to receive credit — i.e. its home central bank — before 4 p.m. ECB time (C.E.T.). Furthermore, the counterparty must ensure that the collateral for securing monetary policy operations is delivered to the account of the correspondent central bank by 4.45 p.m. ECB time (C.E.T.) at the latest. Instructions or deliveries not

([68]) See the "Correspondent Central Banking Model brochure" for further explanations.

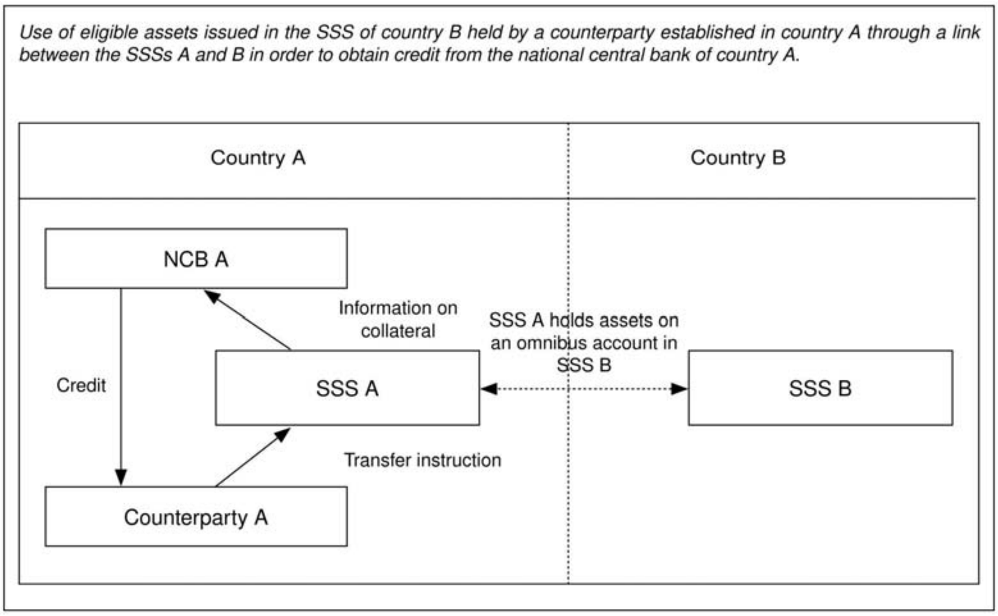
respecting this deadline will only be considered for credit given on the following business day. When the counterparties foresee a need to use the CCBM late in the day, they should, where possible, deliver the assets in advance (i.e. pre-deposit the assets). In exceptional circumstances or when required for monetary policy purposes, the ECB may decide to extend the closing time of the CCBM until the closing time of TARGET.

6.6.2. *Links between securities settlement systems*

In addition to the CCBM, eligible links between EU SSSs can be used for the cross-border transfer of securities.

CHART 4

Links between securities settlement systems



A link between two SSSs allows a participant in one SSS to hold securities issued in another SSS without being a participant in that other SSS. Before these links can be used to transfer collateral for Eurosystem credit operations, they have to be assessed and approved against the standards for the use of EU SSSs. ([69]) ([70])

From a Eurosystem perspective, the CCBM and the links between EU SSSs fulfil the same role of allowing counterparties to use collateral on a cross-border basis, i.e. both enable counterparties to use collateral to obtain credit from their home central bank, even if this collateral was issued in an SSS of another country. The CCBM and the links between SSSs perform this function in different ways. In the CCBM, the cross-border relationship is between the national central banks. They act as custodians for one another. Using the links, the cross-border relationship is between the SSSs. They open omnibus accounts with one another. Assets deposited with a correspondent central bank can only be used to collateralise Eurosystem credit operations. Assets held through a link can be used for Eurosystem credit operations, as well as for any other purpose selected by the counterparty. When using links between SSSs, the counterparties hold the assets on their own account with their home SSS and have no need for a custodian.

([69]) The updated list of eligible links can be found on the ECB's website (www.ecb.int).
([70]) See the publication entitled "*Standards for the use of EU securities settlement systems in ESCB credit operations*", European Monetary Institute, January 1998, on the ECB's website (www.ecb.int).

CHAPTER 7

7. MINIMUM RESERVES ([71])

7.1. General considerations

The ECB requires credit institutions to hold minimum reserves on accounts with the national central banks within the framework of the Eurosystem's minimum reserve system. The legal framework for this system is laid down in Article 19 of the Statute of the ESCB, Council Regulation (EC) No 2531/98 of 23 November 1998 concerning the application of minimum reserves by the European Central Bank ([72]) and Regulation (EC) No 1745/2003 of the European Central Bank of 12 September 2003 on the application of minimum reserves (ECB/2003/9) ([73]). The application of Regulation ECB/2003/9 ensures that the terms and conditions of the Eurosystem's minimum reserve system are uniform throughout the euro area.

The amount of minimum reserves to be held by each institution is determined in relation to its reserve base. The Eurosystem's minimum reserve system enables counterparties to make use of averaging provisions, implying that compliance with reserve requirements is determined on the basis of the average of the end-of-calendar-day balances on the counterparties' reserve accounts over a maintenance period. Institutions' holdings of required reserves are remunerated at the rate on the Eurosystem's main refinancing operations.

The Eurosystem's minimum reserve system primarily pursues the following monetary functions:

— *Stabilisation of money market interest rates*

The averaging provision of the Eurosystem's minimum reserve system aims to contribute to the stabilisation of money market interest rates by giving institutions an incentive to smooth the effects of temporary liquidity fluctuations.

— *Creation or enlargement of a structural liquidity shortage*

The Eurosystem's minimum reserve system contributes to creating or enlarging a structural liquidity shortage. This may be helpful in improving the ability of the Eurosystem to operate efficiently as a supplier of liquidity.

In the application of minimum reserves, the ECB is bound to act in pursuance of the objectives of the Eurosystem as defined in Article 105(1) of the Treaty and Article 2 of the Statute of the ESCB, which implies, inter alia, the principle of not inducing significant undesirable delocation or disintermediation.

7.2. Institutions subject to minimum reserve requirements

Pursuant to Article 19.1 of the Statute of the ESCB, the ECB requires credit institutions established in Member States to hold minimum reserves. This implies that branches in the euro area of entities with no registered office in the euro area are also subject to the Eurosystem's minimum reserve system. However, branches located outside the euro area of credit institutions established in the euro area are not subject to this system.

Institutions will be automatically exempted from reserve requirements from the start of the maintenance period within which their authorisation is withdrawn or surrendered, or within which a decision to submit the institution to winding-up proceedings is taken by a judicial authority or any other competent authority of a participating Member State. According to Regulation (EC) No 2531/98 and Regulation ECB/2003/9, the ECB may also exempt institutions from their obligations under the Eurosystem's minimum reserve system on a non-discriminatory basis if the purposes of this system would not be met by imposing these obligations on those particular institutions. In its decision on any such exemption, the ECB takes into account one or more of the following criteria:

— the institution is pursuing special purpose functions;

— the institution is not exercising active banking functions in competition with other credit institutions; and/or

([71]) The content of this chapter is provided for information purposes only.
([72]) OJ L 318, 27.11.1998, p. 1.
([73]) OJ L 250, 2.10.2003, p. 10.

— the institution has all its deposits earmarked for purposes related to regional and/or international development assistance.

The ECB establishes and maintains a list of institutions subject to the Eurosystem's minimum reserve system. The ECB also makes public a list of any institutions exempt from their obligations under this system for reasons other than their being subject to reorganisation measures ([74]). Counterparties may rely on these lists in deciding whether their liabilities are owed to another institution that is itself subject to reserve requirements. The lists, available to the public after close of business on the last Eurosystem business day of each calendar month, are valid for the calculation of the reserve base for the maintenance period beginning in the calendar month two months later. For example, the list published at the end of February would be valid for the calculation of the reserve base for the maintenance period beginning in April.

7.3. Determination of minimum reserves

(a) Reserve base and reserve ratios

The reserve base of an institution is defined in relation to elements of its balance sheet. The balance sheet data are reported to the national central banks within the general framework of the ECB's money and banking statistics (see Section 7.5) ([75]). For institutions subject to full reporting requirements, the balance sheet data referring to the end of a given calendar month are used to determine the reserve base for the maintenance period starting in the calendar month two months later. For example, the reserve base calculated from the balance sheet of the end of February would be used to calculate the reserve requirements to be fulfilled by counterparties in the maintenance period beginning in April.

The reporting framework for the ECB's money and banking statistics includes the possibility to relieve small institutions of some of the reporting burden. Institutions to which this provision applies only need to report a limited set of balance sheet data on a quarterly basis (as end-of-quarter data) and with a reporting deadline which is longer than that set for larger institutions. For these institutions, the balance sheet data reported for a specific quarter are used to determine, with a lag of two months, the reserve base for the consecutive three reserve maintenance periods. For example, the balance sheet of the end of the first quarter — March — would be valid for the calculation of the reserve base for the maintenance periods beginning in June, July and August.

According to Regulation (EC) No 2531/98, the ECB is entitled to include liabilities resulting from the acceptance of funds together with liabilities resulting from off-balance-sheet items in the reserve base of institutions. In the Eurosystem's minimum reserve system, only the liability categories "deposits" and "debt securities issued" are actually included in the reserve base (see Box 14).

Liabilities vis-à-vis other institutions included in the list of institutions subject to the Eurosystem's minimum reserve system and liabilities vis-à-vis the ECB and the national central banks are not included in the reserve base. In this respect, for the liability category "debt securities issued" the issuer needs to be able to prove the actual amount of these instruments held by other institutions subject to the Eurosystem's minimum reserve system in order to be entitled to deduct them from the reserve base. If such proof cannot be presented, issuers may apply a standardised deduction of a fixed percentage ([76]) to this balance sheet item.

The reserve ratios are determined by the ECB subject to the maximum limit specified in Regulation (EC) No 2531/98. The ECB applies a uniform non-zero reserve ratio to most of the items included in the reserve base. This reserve ratio is specified in the ECB Regulation on minimum reserves. The ECB sets a zero reserve ratio on the following liability categories: "deposits with an agreed maturity of over two years", "deposits redeemable at notice of over two years", "repos" and "debt securities with an agreed maturity of over two years" (see Box 14). The ECB may at any time change the reserve ratios. Changes in reserve ratios are announced by the ECB in advance of the first maintenance period for which the change is effective.

([74]) The lists are available to the public on the ECB's website (www.ecb.int).
([75]) The reporting framework for the ECB's money and banking statistics is presented in Annex 4.
([76]) See Regulation ECB/2003/9. Further information relating to the standardised deduction ratio can be found on the ECB's website (www.ecb.int), as well as on the Eurosystem websites (see Annex 5).

BOX 14

Reserve base and reserve ratios

A. Liabilities included in the reserve base and to which the positive reserve ratio is applied

Deposits

— Overnight deposits

— Deposits with agreed maturity up to two years

— Deposits redeemable at notice up to two years

Debt securities issued

— Debt securities with agreed maturity up to two years

B. Liabilities included in the reserve base and to which a zero reserve ratio is applied

Deposits

— Deposits with agreed maturity over two years

— Deposits redeemable at notice over two years

— Repos

Debt securities issued

— Debt securities with agreed maturity over two years

C. Liabilities excluded from the reserve base

— Liabilities vis-à-vis other institutions subject to the Eurosystem's minimum reserve system

— Liabilities vis-à-vis the ECB and the national central banks

(b) Calculation of reserve requirements

The reserve requirement of each individual institution is calculated by applying, to the amount of eligible liabilities, the reserve ratios for the corresponding categories of liabilities.

Each institution deducts an allowance of EUR 100 000 from its reserve requirement in each Member State in which it has an establishment. The granting of such an allowance shall be without prejudice to the legal obligations of institutions subject to the Eurosystem's minimum reserve system ([77]).

The reserve requirement for each maintenance period is rounded to the nearest euro.

7.4. Maintenance of reserve holdings

(a) Maintenance period

The ECB publishes a calendar of the reserve maintenance periods at least three months before the start of each year ([78]). The maintenance period begins on the settlement day of the first main refinancing operation following the meeting of the Governing Council, at which the monthly assessment of the monetary policy stance is pre-scheduled. Under special circumstances, the published calendar may be amended, depending, among other things, on changes in the schedule of Governing Council meetings.

([77]) For institutions allowed to report statistical data as a group on a consolidated basis according to the provisions of the reporting framework for the ECB's money and banking statistics (see Annex 4), only one such allowance will be granted to the group as a whole, unless the institutions provide data on the reserve base and reserve holdings in a sufficiently detailed manner to enable the Eurosystem to verify their accuracy and quality and to determine the respective reserve requirement of each individual institution included in the group.

([78]) The calendar is normally announced in an ECB press release, to be found on the ECB's website (www.ecb.int). In addition, such a calendar is published in the *Official Journal of the European Union* and on the Eurosystem websites (see Annex 5).

(b) Reserve holdings

Each institution must hold its minimum reserves on one or more reserve accounts with the national central bank in the Member State in which it is established. For institutions with more than one establishment in a Member State, the head office is responsible for fulfilling the aggregate minimum reserves of all the domestic establishments of the institution ([79]). An institution with establishments in more than one Member State is required to hold minimum reserves with the national central bank of each Member State in which it has an establishment, in relation to its reserve base in the corresponding Member State.

Institutions' settlement accounts with the national central banks may be used as reserve accounts. Reserve holdings on settlement accounts may be used for intraday settlement purposes. The daily reserve holding of an institution is calculated as the end-of-day balance on its reserve account.

An institution may apply to the national central bank in the Member State in which the institution is resident for permission to hold all its minimum reserves indirectly through an intermediary. The possibility of holding minimum reserves through an intermediary is, as a rule, restricted to institutions which are constituted in such a way that part of the administration (e.g. treasury management) is normally effected by the intermediary (e.g. networks of savings banks and cooperative banks may centralise their reserve holdings). The holding of minimum reserves through an intermediary is subject to the provisions specified in Regulation ECB/2003/9.

(c) Remuneration of reserve holdings

Holdings of required reserves are remunerated at the average, over the maintenance period, of the ECB's rate (weighted according to the number of calendar days) on the main refinancing operations, calculated using the formula specified in Box 15. Reserve holdings exceeding the required reserves are not remunerated. The remuneration is paid on the second NCB business day following the end of the maintenance period over which the remuneration was earned.

BOX 15

Calculation of the remuneration of holdings of required reserves

The holding of required reserves is remunerated according to the following formula:

$$R_t = \frac{H_t \cdot n_t \cdot r_t}{100 \cdot 360}$$

$$r_t = \sum_{i=1}^{n_t} \frac{Mr_i}{n_t}$$

where:

R_t = remuneration to be paid on holdings of required reserves for the maintenance period t.

H_t = average daily holdings of required reserves for the maintenance period t.

n_t = number of calendar days in the maintenance period t.

r_t = rate of renumeration on holdings of required reserves for the maintenance period t. Standard rounding of the rate of remuneration to two decimals shall be applied.

i = ith calendar day of the maintenance period t.

MR_i = marginal interest rate for the most recent main refinancing operation settled on or before calendar day i.

([79]) If an institution has no head office in a Member State in which it is established, it has to designate a principal branch which would then be responsible for fulfilling the aggregate minimum reserve requirements of all the establishments of the institution in the relevant Member State.

7.5. **Reporting, acknowledgement and verification of the reserve base**

The reserve base items for the application of minimum reserves are calculated by the institutions subject to minimum reserves themselves and are reported to the national central banks within the general framework of the ECB's money and banking statistics (see Annex 4). Article 5 of Regulation ECB/2003/9 defines procedures for the notification and acknowledgement of the reserve base and the reserve requirement of the institution.

The procedure for the notification and acknowledgement of an institution's minimum reserves is as follows. Either the relevant participating national central bank or the institution takes the initiative to calculate that institution's minimum reserves for the relevant maintenance period. The calculated minimum reserves are notified by the calculating party at the latest three NCB business days before the start of the maintenance period. The relevant participating national central bank may specify an earlier date as a time limit for the notification of minimum reserves. It may also specify additional time limits for the institution to notify any revisions to the reserve base, and any revisions to the notified minimum reserves. The notified party shall acknowledge the calculated minimum reserves at the latest on the NCB business day preceding the start of the maintenance period. If the notified party has not replied to the notification by the end of the NCB business day preceding the start of the maintenance period, it shall be deemed to have acknowledged the amount of minimum reserves of the institution for the relevant maintenance period. Once acknowledged, the institution's minimum reserves for the relevant maintenance period cannot be revised.

For institutions that are allowed to act as intermediaries for indirect reserve holdings of other institutions, special reporting requirements are specified in Regulation ECB/2003/9. The holding of reserves through an intermediary does not change the statistical reporting obligations of institutions holding reserves via an intermediary.

The ECB and the national central banks have the right, within the scope of Regulation (EC) No 2531/98, to verify the accuracy and quality of collected data.

7.6. **Non-compliance with minimum reserve obligations**

Non-compliance with the minimum reserve obligations arises if an institution's average end-of-calendar-day balance on its reserve account(s) over the maintenance period is less than its reserve requirement for the corresponding maintenance period.

Where an institution fails to comply with all or part of the reserve requirement, the ECB may, in accordance with Regulation (EC) No 2531/98, impose any one of the following sanctions:

— a payment of up to 5 percentage points above the marginal lending rate, applied to the amount of the reserve requirement which the relevant institution failed to provide; or

— a payment of up to two times the marginal lending rate, applied to the amount of the reserve requirement which the relevant institution failed to provide; or

— the requirement for the relevant institution to establish non-interest-bearing deposits with the ECB or the national central banks of up to three times the amount of the reserve requirement which the relevant institution failed to provide. The maturity of the deposit may not exceed the period during which the institution failed to comply with the reserve requirement.

Where an institution fails to comply with other obligations under ECB Regulations and Decisions related to the Eurosystem's minimum reserve system (e.g. if relevant data are not transmitted in time or are not accurate), the ECB is empowered to impose sanctions in accordance with Council Regulation (EC) No 2532/98 of 23 November 1998 concerning the powers of the European Central Bank to impose sanctions and European Central Bank Regulation (EC) No 2157/1999 of 23 September 1999 on the powers of the European Central Bank to impose sanctions (ECB/1999/4) ([80]). The Executive Board of the ECB may specify and publish the criteria according to which it will apply the sanctions provided for in Article 7(1) of Regulation (EC) No 2531/98 ([81]).

In addition, in the case of serious infringements of the minimum reserve requirements, the Eurosystem may suspend counterparties from participation in open market operations.

([80]) OJ L 264, 12.10.1999, p. 21.

([81]) Such criteria were published in a notice entitled "*Notice of the European Central Bank on the imposition of sanctions for breaches* of *the obligation to hold minimum reserves*" (OJ C 39, 11.2.2000, p. 3).

ANNEX 1

Examples of monetary policy operations and procedures

List of examples

EXAMPLE 1

Liquidity-providing reverse transaction by fixed rate tender

The ECB decides to provide liquidity to the market by means of a reverse transaction organised with a fixed rate tender procedure.

Three counterparties submit the following bids:

Counterparty	**Bid** (EUR millions)
Bank 1	30
Bank 2	40
Bank 3	70
Total	140

The ECB decides to allot a total of EUR 105 million.

The percentage of allotment is:

$$\frac{105}{(30 + 40 + 70)} = 75\,\%$$

The allotment to the counterparties is:

Counterparty	**Bid** (EUR millions)	**Allotment** (EUR millions)
Bank 1	30	22,5
Bank 2	40	30,0
Bank 3	70	52,5
Total	140	105,0

EXAMPLE 2

Liquidity-providing reverse transaction by variable rate tender

The ECB decides to provide liquidity to the market by means of a reverse transaction organised with a variable rate tender procedure.

Three counterparties submit the following bids:

Interest rate (%)	**Amount** (EUR millions)				
	Bank 1	Bank 2	Bank 3	**Total bids**	**Cumulative bids**
3,15				0	0
3,10		5	5	10	10
3,09		5	5	10	20
3,08		5	5	10	30
3,07	5	5	10	20	50
3,06	5	10	15	30	80
3,05	10	10	15	35	115
3,04	5	5	5	15	130
3,03	5		10	15	145
Total	30	45	70	145	

The ECB decides to allot EUR 94 million, implying a marginal interest rate of 3,05 %.

All bids above 3,05 % (for a cumulative amount of EUR 80 million) are fully satisfied. At 3,05 % the percentage of allotment is:

$$\frac{94 - 80}{35} = 40\,\%$$

The allotment to Bank 1 at the marginal interest rate is, for example:

$$0{,}4 \times 10 = 4$$

The total allotment to Bank 1 is:

$$5 + 5 + 4 = 14$$

The allotment results can be summarised as follows:

Counterparties	**Amount** (EUR millions)			
	Bank 1	Bank 2	Bank 3	**Total**
Total bids	30,0	45,0	70,0	145
Total allotment	14,0	34,0	46,0	94

If the allotment procedure follows a single rate (Dutch) auction, the interest rate applied to the amounts allotted to the counterparties is 3,05 %.

If the allotment procedure follows a multiple rate (American) auction, no single interest rate is applied to the amounts allotted to the counterparties; for example, Bank 1 receives EUR 5 million at 3,07 %, EUR 5 million at 3,06 % and EUR 4 million at 3,05 %.

EXAMPLE 3

Issuance of ECB debt certificates by variable rate tender

The ECB decides to absorb liquidity from the market by issuing debt certificates using a variable rate tender procedure.

Three counterparties submit the following bids:

Interest rate (%)	**Amount** (EUR millions)				
	Bank 1	Bank 2	Bank 3	**Total**	**Cumulative bids**
3,00				0	0
3,01	5		5	10	10
3,02	5	5	5	15	25
3,03	5	5	5	15	40
3,04	10	5	10	25	65
3,05	20	40	10	70	135
3,06	5	10	10	25	160
3,08	5		10	15	175
3,10		5		5	180
Total	55	70	55	180	

The ECB decides to allot a nominal amount of EUR 124,5 million, implying a marginal interest rate of 3,05 %.

All bids below 3,05 % (for a cumulative amount of EUR 65 million) are fully satisfied. At 3,05 % the percentage of allotment is:

$$\frac{124{,}5 - 65}{70} = 85\,\%$$

The allotment to Bank 1 at the marginal interest rate is, for example:

$$0{,}85 \times 20 = 17$$

The total allotment to Bank 1 is:

$$5 + 5 + 5 + 10 + 17 = 42$$

The allotment results can be summarised as follows:

Counterparties	**Amount** (EUR millions)			
	Bank 1	Bank 2	Bank 3	**Total**
Total bids	55,0	70,0	55,0	180,0
Total allotment	42,0	49,0	33,5	124,5

EXAMPLE 4

Liquidity-absorbing foreign exchange swap by variable rate tender

The ECB decides to absorb liquidity from the market by executing a foreign exchange swap on the EUR/USD rate by means of a variable rate tender procedure. (Note: The euro is traded at a premium in this example.)

Three counterparties submit the following bids:

Swap points (× 10,000)	**Amount** (EUR millions)				
	Bank 1	Bank 2	Bank 3	**Total**	**Cumulative bids**
6,84				0	0
6,80	5		5	10	10
6,76	5	5	5	15	25
6,71	5	5	5	15	40
6,67	10	10	5	25	65
6,63	25	35	40	100	165
6,58	10	20	10	40	205
6,54	5	10	10	25	230
6,49		5		5	235
Total	65	90	80	235	

The ECB decides to allot EUR 158 million, implying 6,63 marginal swap points. All bids above 6,63 (for a cumulative amount of EUR 65 million) are fully satisfied. At 6,63 the percentage of allotment is:

$$\frac{158 - 65}{100} = 93\,\%$$

The allotment to Bank 1 at the marginal swap points is, for example:

$$0{,}93 \times 25 = 23{,}25$$

The total allotment to Bank 1 is:

$$5 + 5 + 5 + 10 + 23{,}25 = 48{,}25$$

The allotment results can be summarised as follows:

Counterparties	**Amount** (EUR millions)			
	Bank 1	Bank 2	Bank 3	**Total**
Total bids	65,0	90,0	80,0	235,0
Total allotment	48,25	52,55	57,20	158,0

The ECB fixes the spot EUR/USD exchange rate for the operation at 1,1300.

If the allotment procedure follows a single rate (Dutch) auction, at the start date of the operation the Eurosystem buys EUR 158 000 000 and sells USD 178 540 000. At the maturity date of the operation, the Eurosystem sells EUR 158 000 000 and buys USD 178 644 754 (the forward exchange rate is 1,130663 = 1,1300 + 0,000663).

If the allotment procedure follows a multiple rate (American) auction, the Eurosystem exchanges the amounts of euro and US dollars shown in the following table:

Spot transaction			Forward transaction		
Exchange rate	Buy EUR	Sell USD	Exchange rate	Sell EUR	Buy USD
1,1300			1,130684		
1,1300	10 000 000	11 300 000	1,130680	10 000 000	11 306 800
1,1300	15 000 000	16 950 000	1,130676	15 000 000	16 960 140
1,1300	15 000 000	16 950 000	1,130671	15 000 000	16 960 065
1,1300	25 000 000	28 250 000	1,130667	25 000 000	28 266 675
1,1300	93 000 000	105 090 000	1,130663	93 000 000	105 151 659
1,1300			1,130658		
1,1300			1,130654		
1,1300			1,130649		
Total	158 000 000	178 540 000		158 000 000	178 645 339

EXAMPLE 5

Liquidity-providing foreign exchange swap by variable rate tender

The ECB decides to provide liquidity to the market by executing a foreign exchange swap on the EUR/USD rate by means of a variable rate tender procedure. (Note: The euro is traded at a premium in this example.)

Three counterparties submit the following bids:

Swap points (× 10,000)	**Amount** (EUR millions)				
	Bank 1	Bank 2	Bank 3	**Total**	**Cumulative bids**
6,23					
6,27	5		5	10	10
6,32	5		5	10	20
6,36	10	5	5	20	40
6,41	10	10	20	40	80
6,45	20	40	20	80	160
6,49	5	20	10	35	195
6,54	5	5	10	20	215
6,58		5		5	220
Total	60	85	75	220	

The ECB decides to allot EUR 197 million, implying 6,54 marginal swap points. All bids below 6,54 (for a cumulative amount of EUR 195 million) are fully satisfied. At 6,54 the percentage of allotment is:

$$\frac{197 - 195}{20} = 10\,\%$$

The allotment to Bank 1 at the marginal swap points is, for example:

$$0{,}10 \times 5 = 0{,}5$$

The total allotment to Bank 1 is:

$$5 + 5 + 10 + 10 + 20 + 5 + 0{,}5 = 55{,}5$$

The allotment results can be summarised as follows:

Counterparties	**Amount** (EUR millions)			
	Bank 1	Bank 2	Bank 3	**Total**
Total bids	60,0	85,0	75,0	220
Total allotment	55,5	75,5	66,0	197

The ECB fixes the spot EUR/USD exchange rate for the operation at 1,1300.

If the allotment procedure follows a single rate (Dutch) auction, at the start date of the operation the Eurosystem sells EUR 197 000 000 and buys USD 222 610 000. At the maturity date of the operation, the Eurosystem buys EUR 197 000 000 and sells USD 222 738 838 (the forward exchange rate is 1,130654 = 1,1300 + 0,000654).

If the allotment procedure follows a multiple rate (American) auction, the Eurosystem exchanges the amounts of euro and US dollars shown in the following table:

Spot transaction			Forward transaction		
Exchange rate	Sell EUR	Buy EUR	Exchange rate	Buy USD	Sell EUR
1,1300			1,130623		
1,1300	10 000 000	11 300 000	1,130627	10 000 000	11 306 270
1,1300	10 000 000	11 300 000	1,130632	10 000 000	11 306 320
1,1300	20 000 000	22 600 000	1,130636	20 000 000	22 612 720
1,1300	40 000 000	45 200 000	1,130641	40 000 000	45 225 640
1,1300	80 000 000	90 400 000	1,130645	80 000 000	90 451 600
1,1300	35 000 000	39 550 000	1,130649	35 000 000	39 572 715
1,1300	2 000 000	2 260 000	1,130654	2 000 000	2 261 308
1,1300			1,130658		
Total	197 000 000	222 610 000		197 000 000	222 736 573

EXAMPLE 6

Risk control measures

This example illustrates the risk control framework applied to underlying assets used in the Eurosystem's liquidity-providing operations [1]. The example is based on the assumption that a counterparty participates in the following Eurosystem monetary policy operations:

— a main refinancing operation starting on 28 July 2004 and ending on 4 August 2004 where the counterparty is allotted EUR 50 million at an interest rate of 4,24 %;

— a longer-term refinancing operation starting on 29 July 2004 and ending on 21 October 2004 where the counterparty is allotted EUR 45 million at an interest rate of 4,56 %; and

— a main refinancing operation starting on 4 August 2004 and ending on 11 August 2004 where the counterparty is allotted EUR 35 million at an interest rate of 4,26 %.

The characteristics of the underlying tier one assets used by the counterparty to cover these operations are specified in Table 1 below.

Table 1 — Underlying tier one assets used in the transactions

Characteristics						
Name	**Asset class**	**Maturity date**	**Coupon definition**	**Coupon frequency**	**Residual maturity**	**Haircut**
Asset A	Asset-backed instrument	29.8.2006	Fixed rate	6 months	2 years	3,50 %
Asset B	Central government bond	19.11.2008	Variable rate	12 months	4 years	0,50 %
Asset C	Corporate bond	12.5.2015	Zero coupon rate		>10 years	15,00 %

Prices in percentages (including accrued interest) [1]

28.7.2004	29.7.2004	30.7.2004	2.8.2004	3.8.2004	4.8.2004	5.8.2004
102,63	101,98	100,55	101,03	100,76	101,02	101,24
	98,35	97,95	98,15	98,56	98,73	98,57
					55,01	54,87

[1] The prices shown for a specific valuation date correspond to the most representative price on the business day preceding this valuation date.

Earmarking system

First, it is assumed that the transactions are carried out with a national central bank using a system where underlying assets are earmarked for each transaction. The valuation of underlying assets is carried out on a daily basis. The risk control framework can then be described as follows (see also Table 2 below):

1. On 28 July 2004 the counterparty enters into a repurchase transaction with the national central bank, which purchases EUR 50,6 million of Asset A. Asset A is an asset-backed instrument with a fixed coupon maturing on 29 August 2006. It thus has a residual maturity of two years, therefore requiring a valuation haircut of 3,5 %. The market price of Asset A on its reference market on that day is 102,63 %, which includes the accrued interest on the coupon. The counterparty is required to provide an amount of Asset A, which after deduction of the 3,5 % valuation haircut, exceeds the allotted amount of EUR 50 million. The counterparty therefore delivers Asset A for a nominal amount of EUR 50,6 million, the adjusted market value of which is EUR 50 113 203 on that day.

2. On 29 July 2004 the counterparty enters into a repurchase transaction with the national central bank, which purchases EUR 21 million of Asset A (market price 101,98 %, valuation haircut 3,5 %) and EUR 25 million of Asset B (market price 98,35 %). Asset B is a central government bond with variable rate coupon payments, to which a 0,5 % valuation haircut is applied. The adjusted market value of Asset A and Asset B on that day is EUR 45 130 810, thus exceeding the required amount of EUR 45 000 000.

[1] The example is based on the assumption that, in the calculation of the need for a margin call, accrued interest on the liquidity provided is taken into account and a trigger point of 0,5 % of the liquidity provided is applied.

On 29 July 2004 the assets underlying the main refinancing operation initiated on 28 July 2004 are revalued. With a market price of 101,98 %, the haircut-adjusted market value of Asset A is still within the lower and upper trigger amounts. The initially pledged collateral is consequently considered to cater for both the initial amount of liquidity provided and the accrued interest amounting to EUR 5 889.

3. On 30 July 2004 the underlying assets are revalued: the market price of Asset A is 100,55 % and the market price of Asset B is 97,95 %. Accrued interest amounts to EUR 11 778 on the main refinancing operation initiated on 28 July 2004 and EUR 5 700 on the longer-term refinancing operation initiated on 29 July 2004. As a result, the adjusted market value of Asset A in the first transaction falls below the transaction's amount to be covered (i.e. the liquidity provided plus the accrued interest) by EUR 914 218, but also below the lower trigger level of EUR 49 761 719. The counterparty delivers EUR 950 000 of Asset A in nominal value terms, which, after deducting a 3,5 % haircut from the market value based on a price of 100,55 %, restores sufficient collateral coverage ([1]).

   A margin call is also needed on the second transaction since the adjusted market value of the underlying assets used in this transaction (EUR 44 741 520) is below the lower trigger level (EUR 44 780 672). The counterparty therefore provides EUR 270 000 of Asset B with an adjusted market value of EUR 263 143.

4. On 2 and 3 August 2004 the underlying assets are revalued, without causing any margin call for the transactions entered into on 28 and 29 July 2004.

5. On 4 August 2004 the counterparty repays the liquidity provided under the main refinancing operation initiated on 28 July 2004, including the accrued interest of EUR 41 222. The national central bank returns EUR 51 550 000 of Asset A in nominal value.

   On the same day the counterparty enters into a new repurchase transaction with the national central bank, which purchases EUR 75 million of Asset C in nominal value terms. Since Asset C is a zero coupon corporate bond with a residual maturity of more than ten years requiring a valuation haircut of 15 %, the corresponding haircut-adjusted market value on that day is of EUR 35 068 875.

   The revaluation of assets underlying the long-term refinancing operation initiated on 29 July 2004 reveals that the adjusted market value of the assets provided exceeds the upper trigger level by approximately EUR 262 000 and leads to the national central bank returning EUR 262 000 of Asset B in nominal value to the counterparty ([2]).

Pooling system

Second, it is assumed that the transactions are carried out with a national central bank using a pooling system. Assets included in the pool of assets used by the counterparty are not earmarked for specific transactions.

The same sequence of transactions is used in this example as in the above example illustrating an earmarking system. The main difference is that, at revaluation dates, the adjusted market value of all the assets in the pool has to cover the total amount of all of the counterparty's outstanding operations with the national central bank. The margin call of EUR 1 178 398 occurring on 30 July 2004 is identical in this example to the one required in the earmarking system case. The counterparty delivers EUR 1 300 000 of Asset A in nominal value terms, which, after deducting a 3,5 % haircut from the market value based on a price of 100,55 %, restores sufficient collateral coverage.

Moreover, on 4 August 2004, when the main refinancing operation entered into on 28 July 2004 matures, the counterparty may keep the assets on its pledge account. An asset can also be exchanged for another asset as shown in the example, where EUR 51,9 million of Asset A in nominal value are replaced with EUR 75,5 million of Asset C in nominal value to cover the liquidity provided and the accrued interest under all refinancing operations.

The risk control framework in the pooling system is described in Table 3.

([1]) National central banks may perform margin calls in cash rather than securities.

([2]) If a margin had to be paid to the counterparty by the national central bank in relation to the second transaction, such a margin could, in certain cases, be netted out with the margin paid to the national central bank by the counterparty in relation to the first transaction. As a result, there would only be one margin settlement.

Table 2 — Earmarking system

Date	Outstanding transactions	Start date	End date	Interest rate	Liquidity provided
28.7.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000
29.7.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000
30.7.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000
2.8.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000
3.8.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000
4.8.2004	Main refinancing	4.8.2004	11.8.2004	4,26	35 000 000
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000
5.8.2004	Main refinancing	4.8.2004	11.8.2004	4,26	35 000 000
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000

Accrued interest	Total amount to be covered	Lower trigger amount	Upper trigger amount	Adjusted market value	Margin call
—	50 000 000	49 750 000	50 250 000	50 113 203	—
5 889	50 005 889	49 755 859	50 255 918	49 795 814	—
—	45 000 000	44 775 000	45 225 000	45 130 810	—
11 778	50 011 778	49 761 719	50 261 837	49 097 560	– 914 218
5 700	45 005 700	44 780 672	45 230 729	44 741 520	– 264 180
29 444	50 029 444	49 779 297	50 279 592	50 258 131	—
22 800	45 022 800	44 797 686	45 247 914	45 152 222	—
35 333	50 035 333	49 785 157	50 285 510	50 123 818	—
28 500	45 028 500	44 803 358	45 253 643	45 200 595	—
—	35 000 000	34 825 000	35 175 000	35 068 875	—
34 200	45 034 200	44 809 029	45 259 371	45 296 029	261 829
4 142	35 004 142	34 829 121	35 179 162	34 979 625	—
39 900	45 039 900	44 814 701	45 265 100	45 043 420	—

Table 3 — Pooling system

Date	Outstanding transactions	Start date	End date	Interest rate	Liquidity provided	Accrued interest	Total amount to be covered	Lower trigger amount (1)	Upper trigger amount (2)	Adjusted market value	Margin call
28.7.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000	—	50 000 000	49 750 000	Not applicable	50 113 203	—
29.7.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000	5 889	95 005 889	94 530 859	Not applicable	94 926 624	—
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000	—					
30.7.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000	11 778	95 017 478	94 542 390	Not applicable	93 839 080	− 1 178 398
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000	5 700					
2.8.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000	29 444	95 052 244	94 576 983	Not applicable	95 487 902	—
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000	22 800					
3.8.2004	Main refinancing	28.7.2004	4.8.2004	4,24	50 000 000	35 333	95 063 833	94 588 514	Not applicable	95 399 949	—
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000	28 500					
4.8.2004	Main refinancing	4.8.2004	11.8.2004	4,26	35 000 000	—	80 034 200	79 634 029	Not applicable	80 333 458	—
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000	34 200					
5.8.2004	Main refinancing	4.8.2004	11.8.2004	4,26	35 000 000	4 142	80 044 042	79 643 821	Not applicable	80 248 396	—
	Longer-term refinancing	29.7.2004	27.10.2004	4,56	45 000 000	39 900					

(1) In a pooling system, the lower trigger amount is the lowest threshold for margin calls. In practice, most national central banks require additional collateral whenever the haircut-adjusted market value of the collateral pool falls below the total amount to be covered.

(2) In a pooling system, the notion of upper trigger amount is not relevant, since the counterparty will constantly target an excess amount of collateral provided in order to minimise operational transactions.

ANNEX 2

Glossary

Actual/360: the *day-count convention* applied for the calculation of interest on a credit, implying that the interest is calculated over the actual number of calendar days over which the credit is extended, on the basis of a 360-day year. This day-count convention is applied in *Eurosystem* monetary policy operations.

American auction: see *multiple rate auction*.

Averaging provision: a provision allowing *counterparties* to fulfil their *reserve requirements* on the basis of their average *reserve holdings* over the *maintenance period*. The averaging provision contributes to the stabilisation of money market interest rates by giving institutions an incentive to smooth the effects of temporary liquidity fluctuations. The *Eurosystem's* minimum reserve system allows for averaging.

Bilateral procedure: a procedure whereby the central bank deals directly with only one or a few *counterparties*, without making use of tender procedures. Bilateral procedures include operations executed through stock exchanges or market agents.

Book-entry system: an accounting system that permits the transfer of securities and other financial assets without the physical movement of paper documents or certificates (e.g. the electronic transfer of securities). See also *dematerialisation*.

Central securities depository (CSD): an entity which holds and administers securities or other financial assets, holds the issuance accounts, and enables transactions to be processed by book entry. Assets may exist either physically (but immobilised within the CSD) or in a dematerialised form (i.e. only as electronic records).

Close links: a situation in which the counterparty is linked to an issuer of debt instruments by reason of the fact that: (i) the counterparty owns 20 % or more of the capital of the issuer, or one or more undertakings in which the counterparty owns the majority of the capital own 20 % or more of the capital of the issuer, or the counterparty and one or more undertakings in which the counterparty owns the majority of the capital together own 20 % or more of the capital of the issuer; or (ii) the issuer owns 20 % or more of the capital of the counterparty, or one or more undertakings in which the issuer owns the majority of the capital own 20 % or more of the capital of the counterparty, or the issuer and one or more undertakings in which the issuer owns the majority of the capital together own 20 % or more of the capital of the counterparty; or (iii) a third party owns both the majority of the capital of the counterparty and the majority of the capital of the issuer, either directly or indirectly, through one or more undertakings in which that third party owns the majority of the capital.

Collateral pooling system: a central bank system for managing collateral, in which *counterparties* open a pool account to deposit assets collateralising their transactions with the central bank. In a pooling system, by contrast with an *earmarking system*, the underlying assets are not earmarked for individual transactions.

Collection of fixed-term deposits: a monetary policy instrument that may be used by the *Eurosystem* for fine-tuning purposes, where the Eurosystem offers remuneration on *counterparties*' fixed-term deposits on accounts with the *national central banks* in order to absorb liquidity from the market.

Correspondent banking: an arrangement under which one *credit institution* provides payment and other services to another credit institution. Payments through correspondents are often executed through reciprocal accounts (nostro and loro accounts) to which standing credit lines may be attached. Correspondent banking services are primarily provided across international boundaries but are also known as agency relationships in some domestic contexts. A loro account is the term used by a correspondent to describe an account held on behalf of a foreign credit institution; the foreign credit institution would in turn regard this account as its nostro account.

Correspondent central banking model (CCBM): a mechanism established by the *European System of Central Banks* with the aim of enabling *counterparties* to use underlying assets in a cross-border context. In the CCBM, *national central banks* act as custodians for one another. This means that each national central bank has a securities account in its securities administration for each of the other national central banks (and for the ECB).

Counterparty: the opposite party in a financial transaction (e.g. any transaction with the central bank).

Credit institution: refers in this document to an institution covered by the definition contained in Article 1(1) of Directive 2000/12/EC of the European Parliament and of the Council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions, as amended by Directive 2000/28/EC of the European Parliament and of the Council of 18 September 2000. Thus, a credit institution is: (i) an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credit for its own account, or (ii) an undertaking or any other legal person, other than those under (i), which issues means of payment in the form of electronic money. 'Electronic money' shall mean monetary value as represented by a claim on the issuer which is: (a) stored on an electronic device, (b) issued on receipt of funds of an amount not lower in value than the monetary value issued, and (c) accepted as a means of payment by undertakings other than the issuer.

Cross-border settlement: a settlement which takes place in a country other than the country or countries in which one or both of the parties to the trade are located.

Custodian: an entity which undertakes the safekeeping and administration of securities and other financial assets on behalf of others.

Day-count convention: the convention regulating the number of days included in the calculation of interest on credits. The *Eurosystem* applies the day-count convention *actual/360* in its monetary policy operations.

Delivery versus payment (DVP) or delivery against payment system: a mechanism in an exchange-for-value settlement system which ensures that the *final transfer* of assets (securities or other financial instruments) occurs if, and only if, the final transfer of another asset (or other assets) occurs.

Dematerialisation: the elimination of physical certificates or documents of title which represent ownership of financial assets so that the financial assets exist only as accounting records.

Deposit facility: a *standing facility* of the *Eurosystem* which *counterparties* may use to make overnight deposits at a national central bank, which are remunerated at a pre-specified interest rate.

Depository: an agent with the primary role of recording securities either physically or electronically and keeping records of the ownership of these securities.

Deposits redeemable at notice: the instrument category consisting of deposits for which the holder has to respect a fixed period of notice before being able to withdraw the funds. In some cases, there is the possibility of withdrawing a certain fixed amount in a specific period or of earlier withdrawal subject to the payment of a penalty.

Deposits with agreed maturity: the instrument category consisting mainly of time deposits with a given maturity which, depending on national practices, may be either unconvertible prior to maturity or convertible only subject to a penalty. This category also encompasses some non-marketable debt instruments, such as non-marketable (retail) certificates of deposit.

Dutch auction: see *single rate auction*.

Earmarking system: a system for central banks' collateral management where liquidity is provided against assets earmarked for each individual transaction.

ECB time: the time of the place in which the ECB is located.

ECB payment mechanism (EPM): the payment arrangements organised within the ECB and connected to the *TARGET system* for the purpose of effecting: (i) payments between accounts held at the ECB, and (ii) payments through the *TARGET system* between accounts held at the ECB and at the *national central banks*.

EEA (European Economic Area) countries: the EU Member States and Iceland, Liechtenstein and Norway.

End-of-day: the time of the business day (after the *TARGET system* has closed) at which the payments processed in the TARGET system are finalised for the day.

Euro area: the area encompassing the EU *Member States* which have adopted the euro as their single currency in accordance with the *Treaty* and in which a single monetary policy is conducted under the responsibility of the Governing Council of the ECB.

European System of Central Banks (ESCB): refers to the European Central Bank (ECB) and the national central banks of the EU Member States. It should be noted that the national central banks of those Member States which have not adopted the single currency in accordance with the *Treaty* retain their powers in the field of monetary policy according to national law and are thus not involved in the conduct of the monetary policy of the *Eurosystem*.

Eurosystem: comprises the European Central Bank (ECB) and the *national central banks* of the *Member States* of the *euro area*. The decision-making bodies of the Eurosystem are the Governing Council and the Executive Board of the ECB.

Eurosystem business day: any day on which the ECB and at least one *national central bank* are open for the purpose of conducting *Eurosystem* monetary policy operations.

Final transfer: an irrevocable and unconditional transfer which effects a discharge of the obligation to make the transfer.

Fine-tuning operation: a non-regular *open market operation* executed by the *Eurosystem* mainly in order to deal with unexpected liquidity fluctuations in the market.

Fixed rate instrument: a financial instrument for which the coupon is fixed throughout the life of the instrument.

Fixed rate tender: a *tender procedure* where the interest rate is specified in advance by the central bank and participating *counterparties* bid the amount of money they want to transact at the fixed interest rate.

Floating rate instrument: a financial instrument for which the coupon is periodically reset relative to a reference index to reflect changes in short or medium-term market interest rates. Floating rate instruments have either *pre-fixed coupons* or *post-fixed coupons*.

Foreign exchange swap: the simultaneous spot purchase/sale and forward sale/purchase of one currency against another. The *Eurosystem* executes open market monetary policy operations in the form of foreign exchange swaps where the *national central banks* (or the ECB) buy (or sell) euro spot against a foreign currency and at the same time sell (or buy) it back in a forward transaction.

Gross settlement system: a transfer system in which the settlement of funds or the transfer of securities occurs on an instruction-by-instruction basis.

Haircut: see *valuation haircut*.

Initial margin: a risk control measure that may be applied by the Eurosystem in *reverse transactions*, implying that the collateral required for a transaction is equal to the credit extended to the *counterparty* plus the value of the initial margin.

Interlinking mechanism: within the *TARGET system*, the Interlinking mechanism provides common procedures and an infrastructure which allow payment orders to move from one domestic *RTGS system* to another.

International Securities Identification Number (ISIN): an international identification code assigned to securities issued in financial markets.

Intraday credit: credit extended for a period of less than one business day. It may be extended by central banks to even out mismatches in payment settlements and can take the form of: (i) a collateralised overdraft, or (ii) a lending operation against a pledge or in a *repurchase agreement*.

Inverse floating rate instrument: a structured note where the rate of interest paid to the holder of the note varies inversely with changes in a certain reference interest rate.

Issuer: the entity which is obligated on a security or other financial instrument.

Link between securities settlement systems: a link consists of all the procedures and arrangements which exist between two *securities settlement systems (SSSs)* for the transfer of securities between the two SSSs concerned through a book-entry process.

Longer-term refinancing operation: a regular *open market operation* executed by the Eurosystem in the form of a *reverse transaction*. Longer-term refinancing operations are executed through monthly *standard tenders* and normally have a maturity of three months.

Lump-sum allowance: a fixed amount which an institution deducts in the calculation of its *reserve requirement* within the minimum reserve framework of the *Eurosystem*.

Main refinancing operation: a regular *open market operation* executed by the Eurosystem in the form of a *reverse transaction*. Main refinancing operations are conducted through weekly *standard tenders* and normally have a maturity of one week.

Maintenance period: the period over which compliance with reserve requirements is calculated. The ECB publishes a calendar of the reserve maintenance periods at least three months before the start of each year. Maintenance periods begin on the settlement day of the first main refinancing operation following the meeting of the Governing Council at which the monthly assessment of the monetary policy stance is pre-scheduled. They normally end on the day preceding the similar settlement day in the following month. Under special circumstances, the published calendar may be amended, depending, among other things, on changes in the schedule of Governing Council meetings.

Margin call: a procedure related to the application of *variation margins*, implying that if the value, as regularly measured, of the underlying assets falls below a certain level, the central bank requires *counterparties* to supply additional assets (or cash). Similarly, if the value of the underlying assets, following their revaluation, were to exceed the amount owed by the counterparties plus the variation margin, the counterparty may ask the central bank to return the excess assets (or cash) to the counterparty.

Marginal interest rate: the interest rate at which the total tender allotment is exhausted.

Marginal lending facility: a *standing facility* of the *Eurosystem* which *counterparties* may use to receive overnight credit from a national central bank at a pre-specified interest rate against eligible assets.

Marginal swap point quotation: the *swap point* quotation at which the total tender allotment is exhausted.

Marking to market: see *variation margin*.

Maturity bucket: a class of debt instruments within a liquidity category of tier one assets or within a liquidity category of tier two assets, the *residual maturity* of which is within a certain range of values, e.g. the three-to-five-year maturity bucket.

Maturity date: the date on which a monetary policy operation expires. In the case of a *repurchase* agreement or swap, the maturity date corresponds to the *repurchase date*.

Maximum bid limit: the limit on the largest acceptable bid from an individual *counterparty* in a tender operation. The *Eurosystem* may impose maximum bid limits in order to avoid disproportionately large bids from individual counterparties.

Maximum bid rate: the upper limit to the interest rate at which *counterparties* may submit bids in *variable rate tenders*. Bids at a rate above the maximum bid rate announced by the ECB are discarded.

Member State: refers in this document to an EU Member State which has adopted the single currency in accordance with the *Treaty*.

Minimum allotment amount: the lower limit of the amount to be allotted to individual *counterparties* in a tender operation. The *Eurosystem* may decide to allot a minimum amount to each counterparty in its tender operations.

Minimum allotment ratio: the lower limit, expressed in percentage terms, of the ratio of bids at the *marginal interest rate* to be allotted in a tender operation. The Eurosystem may decide to apply a minimum allotment ratio in its tender operations.

Minimum bid rate: the lower limit to the interest rates at which *counterparties* may submit bids in *variable rate tenders*.

Monetary financial institution (MFI): financial institutions which together form the money-issuing sector of the *euro area*. These include central banks, resident *credit institutions*, as defined in Community law, and all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities.

Multiple rate auction (American auction): an auction at which the allotment interest rate (or price/*swap point*) equals the interest rate offered in each individual bid.

National central bank (NCB): refers in this document to a central bank of an EU *Member State* which has adopted the single currency in accordance with the *Treaty*.

NCB business day: any day on which the *national central bank* of a specific Member State is open for the purpose of conducting *Eurosystem* monetary policy operations. In some Member States, branches of the national central bank may be closed on NCB business days owing to local or regional bank holidays. In such cases, the relevant national central bank is responsible for informing the *counterparties* in advance of the arrangements to be made for transactions involving those branches.

Open market operation: an operation executed on the initiative of the central bank in the financial market. With regard to their aims, regularity and procedures, Eurosystem open market operations can be divided into four categories: *main refinancing operations, longer-term refinancing operations, fine-tuning operations* and *structural operations*. As for the instruments used, *reverse transactions* are the main open market instrument of the Eurosystem and can be employed in all four categories of operations. In addition, the issuance of debt certificates and *outright transactions* are available for *structural operations*, while *outright transactions, foreign exchange swaps* and the *collection of fixed-term deposits* are available for the conduct of *fine-tuning operations*.

Outright transaction: a transaction whereby assets are bought or sold up to their maturity (spot or forward).

Pooling system: see *collateral pooling system*.

Post-fixed coupon: a coupon on *floating rate instruments* which is determined on the basis of the values taken by the reference index at a certain date (or dates) during the coupon accrual period.

Pre-fixed coupon: a coupon on *floating rate instruments* which is determined on the basis of the values taken by the reference index at a certain date (or dates) before the start of the coupon accrual period.

Purchase date: the date on which the sale of purchased assets by the seller to the buyer becomes effective.

Purchase price: the price at which purchased assets are sold or are to be sold to the buyer by the seller.

Quick tender: the *tender procedure* used by the *Eurosystem* for *fine-tuning operations* when it is deemed desirable to have a rapid impact on the liquidity situation in the market. Quick tenders are executed within a time frame of 90 minutes and are restricted to a limited set of *counterparties*.

Repo operation: a liquidity-providing *reverse transaction* based on a *repurchase agreement*.

Repurchase agreement: an arrangement whereby an asset is sold while the seller simultaneously obtains the right and obligation to repurchase it at a specific price on a future date or on demand. Such an agreement is similar to collateralised borrowing, with the difference that ownership of the securities is not retained by the seller. The *Eurosystem* uses repurchase agreements with a fixed maturity in its *reverse transactions*.

Repurchase date: the date on which the buyer is obliged to sell back assets to the seller in relation to a transaction under a *repurchase agreement*.

Repurchase price: the price at which the buyer is obliged to sell back assets to the seller in relation to a transaction under a *repurchase agreement*. The repurchase price equals the sum of the *purchase price* and the price differential corresponding to the interest on the extended liquidity over the maturity of the operation.

Reserve account: an account with the *national central bank* on which a *counterparty's reserve holdings* are maintained. The counterparties' *settlement accounts* with the *national central banks* may be used as reserve accounts.

Reserve base: the sum of the balance sheet items which constitute the basis for calculating the *reserve requirement* of a credit institution.

Reserve holdings: *counterparties*' holdings on their *reserve accounts* which serve to fulfil *reserve requirements*.

Reserve ratio: the ratio defined by the central bank for each category of balance sheet items included in the *reserve base*. The ratios are used to calculate *reserve requirements*.

Reserve requirement: the requirement for institutions to hold minimum reserves with the central bank. Within the minimum reserve framework of the *Eurosystem*, the reserve requirement of a *credit institution* is calculated by multiplying the *reserve ratio* for each category of items in the *reserve base* with the amount of those items on the institution's balance sheet. In addition, institutions deduct a *lump-sum allowance* from their reserve requirement.

Residual maturity: time remaining until the maturity date of a debt instrument.

Reverse transaction: an operation whereby the *national central bank* buys or sells assets under a *repurchase agreement* or conducts credit operations against collateral.

RTGS (real-time gross settlement) system: a settlement system in which processing and settlement take place on an order-by-order basis (without netting) in real time (continuously). See also *TARGET system*.

Safe custody account: a securities account managed by the central bank on which *credit institutions* can place securities deemed suitable to back central bank operations.

Securities settlement system (SSS): a system which permits the holding and transfer of securities or other financial assets, either free of payment (FOP) or against payment (*delivery versus payment*).

Settlement account: an account held by a direct participant in a national *RTGS system* with the central bank for the purpose of processing payments.

Settlement agent: an institution which manages the settlement process (e.g. the determination of settlement positions, the monitoring of payment exchanges, etc.) for transfer systems or other arrangements requiring settlement.

Settlement date: the date on which a transaction is settled. The settlement might take place on the same day as the trade (same-day settlement) or one or several days after the trade (the settlement date is specified as the *trade date (T)* + the settlement lag).

Single list: a list of assets that fulfil specific eligibility criteria and that will, as from May 2005, gradually be the only assets used to collateralise the liquidity-providing operations of the *Eurosystem*.

Single rate auction (Dutch auction): an auction in which the allotment interest rate (or price/*swap point*) applied for all satisfied bids is equal to the *marginal interest rate*.

Solvency risk: the risk of loss owing to the failure (bankruptcy) of an issuer of a financial asset or to the insolvency of the *counterparty*.

Standard tender: a *tender procedure* used by the *Eurosystem* in its regular *open market operations*. Standard tenders are carried out within a time frame of 24 hours. All *counterparties* fulfilling the general eligibility criteria are entitled to submit bids in standard tenders.

Standardised deduction: the fixed percentage of the amount outstanding of debt securities with an agreed maturity of up to two years (including money market paper) which can be deducted from the *reserve base* by the issuers which cannot present evidence that such outstanding amount is held by other institutions subject to the minimum reserve system of the *Eurosystem*, by the ECB or by a *national central bank*.

Standing facility: a central bank facility available to counterparties at their own initiative. The *Eurosystem* offers two overnight standing facilities: the *marginal lending facility* and the *deposit facility*.

Start date: the date on which the first leg of a monetary policy operation is settled. The start date corresponds to the *purchase date* for operations based on *repurchase agreements* and *foreign exchange swaps*.

Strip (separate trading of interest and principal): a *zero coupon bond* created in order to trade separately the claims on particular cash flows of a security and the principal of the same instrument.

Structural operation: an *open market operation* executed by the *Eurosystem* mainly in order to adjust the structural liquidity position of the financial sector vis-à-vis the Eurosystem.

Swap point: the difference between the exchange rate of the forward transaction and the exchange rate of the spot transaction in a *foreign exchange swap*.

TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system: the real-time gross settlement system for the euro. It is a decentralised system consisting of 15 national *RTGS systems*, the *ECB payment mechanism* and *the Interlinking mechanism*.

Tender procedure: a procedure in which the central bank provides liquidity to or withdraws liquidity from the market on the basis of bids submitted by *counterparties* in competition with each other. The most competitive bids are satisfied first until the total amount of liquidity to be provided or withdrawn by the central bank is exhausted.

Tier one asset: a marketable asset fulfilling certain uniform *euro area*-wide eligibility criteria specified by the ECB.

Tier two asset: a marketable or non-marketable asset for which specific eligibility criteria are established by the *national central banks*, subject to ECB approval.

Trade date (T): the date on which a trade (i.e. an agreement on a financial transaction between two *counterparties*) is struck. The trade date might coincide with the *settlement date* for the transaction (same-day settlement) or precede the settlement date by a specified number of business days (the settlement date is specified as T + the settlement lag).

Treaty: the Treaty establishing the European Community. It is oftern referred to as the 'Treaty of Rome', as amended.

Trigger point: a pre-specified level of the value of the liquidity provided at which a *margin call* is executed.

Valuation date: the date on which the assets underlying credit operations are valued.

Valuation haircut: a risk control measure applied to underlying assets used in *reverse transactions*, implying that the central bank calculates the value of underlying assets as the market value of the assets reduced by a certain percentage (*haircut*). The *Eurosystem* applies valuation haircuts reflecting features of the specific assets, such as the residual maturity.

Variable rate tender: a *tender procedure* whereby the *counterparties* bid both the amount of money they want to transact with the central bank and the interest rate at which they want to enter into the transaction.

Variation margin (marking to market): the Eurosystem requires a certain level of the market value of the underlying assets used in its liquidity-providing *reverse transactions* to be maintained over time. This implies that if the value, measured on a regular basis, of the underlying assets falls below a certain level, the *national central bank* will require the *counterparty* to supply additional assets or cash (i.e. a *margin call*). Similarly, if the value of the underlying assets, following their revaluation, exceeds a certain level, the counterparty may retrieve the excess assets or cash. See also Section 6.4.

Volume tender: see *fixed rate tender*.

Zero coupon bond: a security paying only one cash flow during its life. For the purpose of this document, zero coupon bonds include securities issued at a discount and securities which deliver a single coupon at maturity. A *strip* is a special type of zero coupon bond.

ANNEX 3

Selection of counterparties for foreign exchange intervention operations and foreign exchange swaps for monetary policy purposes

The selection of counterparties for foreign exchange intervention operations and foreign exchange swaps for monetary policy purposes follows a uniform approach irrespective of the chosen organisational set-up for the Eurosystem's external operations. The selection policy does not entail a substantial departure from existing market standards, as it has been derived from the harmonisation of the national central banks' current best practices. The selection of counterparties to Eurosystem foreign exchange intervention operations is based, primarily, on two sets of criteria.

The first set of criteria is inspired by the principle of prudence. A first prudential criterion is creditworthiness, which is assessed using a combination of different methods (e.g. using credit ratings available from commercial agencies and the in-house analysis of capital and other business ratios); a second criterion is that the Eurosystem requires all its potential foreign exchange intervention counterparties to be subject to supervision by a recognised supervisor; and, as a third criterion, all the Eurosystem's foreign exchange intervention counterparties need to follow high ethical standards and have a good reputation.

Once the minimum prudence requirement is fulfilled, the second set of criteria inspired by efficiency considerations is applied. A first efficiency criterion relates to competitive pricing behaviour and the counterparty's ability to handle large volumes, even in turbulent market conditions. The quality and coverage of information provided by counterparties feature among other efficiency criteria.

The pool of potential foreign exchange intervention counterparties is sufficiently large and diverse to guarantee the necessary flexibility when implementing intervention operations. It enables the Eurosystem to choose from among different intervention channels. In order to be able to intervene efficiently in different geographical locations and time zones, the Eurosystem can use counterparties in any international financial centre. However, in practice, a substantial share of the counterparties tend to be located in the euro area. For foreign exchange swaps executed for monetary policy purposes, the range of counterparties corresponds to the counterparties located in the euro area which are selected for Eurosystem foreign exchange intervention operations.

The national central banks may apply limit-based systems in order to control credit exposures vis-à-vis individual counterparties in foreign exchange swaps conducted for monetary policy purposes.

ANNEX 4

Reporting framework for the money and banking statistics of the European Central Bank [1]

1. *Introduction*

Council Regulation (EC) No 2533/98 of 23 November 1998 concerning the collection of statistical information by the European Central Bank [2] defines the natural and legal persons which are subject to reporting requirements (the so-called reference reporting population), the confidentiality regime and the appropriate provisions for enforcement in accordance with Article 5.4 of the Statute of the European System of Central Banks and of the European Central Bank (Statute of the ESCB). Furthermore, it entitles the ECB to use its regulatory power:

— to specify the actual reporting population;

— to define the ECB's statistical reporting requirements and impose them on the actual reporting population of participating Member States; and

— to specify the conditions under which the ECB and the national central banks (NCBs) may exercise the right to verify or to carry out the compulsory collection of statistical information.

2. *General considerations*

The purpose of Regulation (EC) No 2423/2001 of the European Central Bank of 22 November 2001 concerning the consolidated balance sheet of the monetary financial institutions sector (ECB/2001/13) [3] is to enable the ECB and, in accordance with Article 5.2 of the Statute, the NCBs — which carry out the work to the extent possible — to collect the statistical material required for the fulfilment of the tasks of the European System of Central Banks (ESCB) and, in particular, its task to define and implement the monetary policy of the Community in accordance with Article 105 (2), first indent, of the Treaty establishing the European Community (Treaty). The statistical information collected in accordance with Regulation ECB/2001/13 is used to establish the consolidated balance sheet of the monetary financial institution (MFI) sector, the principal aim of which is to provide the ECB with a comprehensive statistical picture of monetary developments covering the aggregated financial assets and liabilities of MFIs located in the participating Member States, which are viewed as one economic territory.

For statistical purposes the ECB's reporting requirements in the context of the consolidated balance sheet of the MFI sector are based on three main considerations.

First, the ECB must receive comparable, reliable and up-to-date statistical information which is collected under comparable terms and conditions throughout the euro area. Although the data are collected in a decentralised way by national central banks in accordance with Articles 5.1 and 5.2 of the Statute and, as far as necessary, in combination with further statistical requirements for Community or national purposes, a sufficient degree of harmonisation and compliance with minimum reporting standards is required in view of the need to establish a reliable statistical basis for the definition and conduct of the single monetary policy.

Second, the reporting obligations set out in Regulation ECB/2001/13 must observe the principles of transparency and legal certainty. The reason for this is that said Regulation is binding in its entirety and directly applicable throughout the euro area. It imposes obligations directly on natural and legal persons on which the ECB may impose sanctions whenever the ECB's reporting requirements are not fulfilled (see Article 7 of Regulation (EC) No 2533/98. The reporting obligations are therefore clearly defined and any discretion exercised by the ECB when verifying or compulsorily collecting statistical information follows identifiable principles.

Third, the ECB must minimise the reporting burden involved (see Article 3(a) of Regulation (EC) No 2533/98). Therefore, the statistical material collected by national central banks under Regulation ECB/2001/13 is also used to calculate the reserve base in accordance with Regulation (EC) No 1745/2003 of the European Central Bank of 12 September 2003 on the application of minimum reserves (ECB/2003/9) [4].

---

(1) The content of this annex is provided for information purposes only.
(2) OJ L 318, 27.11.1998, p. 8.
(3) OJ L 333, 17.12.2001, p. 1. This Regulation has replaced Regulation (EC) No 2819/98 of the European Central Bank of 1 December 1998 (ECB/1998/16).
(4) OJ L 250, 2.10.2003, p. 10.

The articles of Regulation ECB/2001/13 restrict themselves to defining, in general terms, the actual reporting population, its reporting obligations and the principles according to which the ECB and the national central banks normally exercise their competence to verify or compulsorily collect statistical information. The details of the statistical information to be reported in order to fulfil the ECB's statistical reporting requirements and the minimum standards to be followed are specified in Annexes I to IV to Regulation ECB/2001/13.

3. *Actual reporting population; list of MFIs for statistical purposes*

MFIs comprise resident credit institutions, as defined in Community law, and all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities. The ECB establishes and maintains a list of institutions in accordance with this definition and following the classification principles specified in Annex I to Regulation ECB/2001/13. The competence to establish and maintain this List of MFIs for statistical purposes lies with the Executive Board of the ECB. The population of MFIs resident in the euro area constitutes the actual reporting population.

National central banks are entitled to grant derogations to small MFIs if the MFIs which contribute to the monthly consolidated balance sheet account for at least 95 % of the total MFI balance sheet in each participating Member State. These derogations enable national central banks to apply the method of "cutting off the tail".

4. *Statistical reporting obligations*

To establish the consolidated balance sheet, the actual resident reporting population must report statistical information related to their balance sheet on a monthly basis. Further information is required on a quarterly basis. The statistical information to be reported is further specified in Annex I to Regulation ECB/2001/13.

The relevant statistical data are collected by the national central banks, which must define the reporting procedures to be followed. Regulation ECB/2001/13 does not prevent national central banks from collecting, from the actual reporting population, the statistical information necessary to fulfil the statistical requirements of the ECB as part of a broader statistical reporting framework which the national central banks establish under their own responsibility in accordance with Community or national law or established practice and which serves other statistical purposes. However, this should be without prejudice to the fulfilment of the statistical requirements set out in Regulation ECB/2001/13. In specific cases, the ECB may rely on statistical information collected for such purposes to fulfil its requirements.

The consequence of a derogation being granted by a national central bank as defined above is that the small MFIs concerned are subject to reduced reporting obligations (implying, inter alia, only quarterly reporting) which are compulsory in the context of minimum reserves and are specified in Annex II to Regulation ECB/2001/13. Requirements for those small MFIs that are not credit institutions are set out in Annex III to said Regulation. However, MFIs which have been granted a derogation have the option of fulfilling the full reporting requirements.

5. *Use of statistical information under the ECB Regulation on minimum reserves*

To minimise the reporting burden and to avoid any duplication in the collection of statistical information, the statistical information related to the balance sheet reported by MFIs under Regulation ECB/2001/13 is also used to calculate the reserve base under Regulation ECB/2003/9.

Indeed, for statistical purposes, the reporting agents have to report data to their respective national central banks in accordance with the framework of Table 1 below, which is included in Annex I to Regulation ECB/2001/13. In Table 1, the boxes marked with an "*" are used by the reporting institutions to calculate their reserve base (see Box 14 in Chapter 7 of this publication).

In order to make a correct calculation of the reserve base to which a positive reserve ratio is applied, a detailed breakdown is required for deposits with an agreed maturity of over two years, for deposits redeemable at notice of over two years and for repo liabilities of credit institutions vis-à-vis the ("domestic" and "other participating Member States") "MFIs", "credit institutions subject to reserve requirements, ECB and NCBs" and "Central government" sectors, and vis-à-vis the Rest of the World (RoW).

TABLE 1

Data to be provided at a monthly frequency

BALANCE SHEET ITEMS	A. Domestic									B. Other participating Member States									C. Rest of the world	D. Not allocated
	MFIs [3]		Non-MFIs							MFIs [3]		Non-MFIs								
			General government		Other resident sectors							General government		Other resident sectors						
		of which credit institutions subject to RRs, ECB and NCBs	Central government	Other general government	Total	Other financial intermediaries + financial auxiliaries (S.123+S.124)	Insurance corporations and pension funds (S.125)	Non-financial corporations (S.11)	Households + non-profit institutions serving households (S.14+S.15)		of which credit institutions subject to RRs, ECB and NCBs	Central government	Other general government	Total	Other financial intermediaries + financial auxiliaries (S.123+S.124)	Insurance corporations and pension funds (S.125)	Non-financial corporations (S.11)	Households + non-profit institutions serving households (S.14+S.15)		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
LIABILITIES																				
8 Currency in circulation																				
9 Deposits	*	*	*							*	*	*							*	
up to 1 year																				
over 1 year																				
9e Euro	*	*								*	*									
9.1e Overnight				*	*								*	*						
9.2e With agreed maturity																				
up to 1 year				*	*								*	*						
over 1 and up to 2 years				*	*								*	*						
over 2 years [1]	*	*	*	*	*					*	*	*	*	*					*	
9.3e Redeemable at notice																				
up to 3 months [2]				*	*								*	*						
over 3 months				*	*								*	*						
of which over 2 years [4]	*	*	*	*	*					*	*	*	*	*					*	
9.4e Repos	*	*	*	*	*					*	*	*	*	*					*	
9x Foreign currencies																				
9.1x Overnight				*	*								*	*						
9.2x With agreed maturity																				
up to 1 year				*	*								*	*						
over 1 and up to 2 years				*	*								*	*						
over 2 years [1]	*	*	*	*	*					*	*	*	*	*					*	
9.3x Redeemable at notice																				
up to 3 months [2]				*	*								*	*						
over 3 months				*	*								*	*						
of which over 2 years [4]	*	*	*	*	*					*	*	*	*	*					*	
9.4x Repos	*	*	*	*	*					*	*	*	*	*					*	
10 MMFs shares/units																				
11 Debt securities issued																				
11e Euro																				
up to 1 year																				*
over 1 and up to 2 years																				*
over 2 years																				*
11x Foreign currencies																				
up to 1 year																				*
over 1 and up to 2 years																				*
over 2 years																				*
12 Capital and reserves																				
13 Remaining liabilities																				

(1) Including administratively regulated deposits.
(2) Including non-transferable sight savings deposits.
(3) Credit institutions may report positions vis-à-vis “MFIs other than CIs subject to minimum reserves, ECB and NCBs” rather than vis-à-vis “MFIs” and “CIs subject to minimum reserves, ECB and NCBs”, provided that no loss of detail is implied and no bold printed positions are affected.
(4) The reporting of this item is volumtary until further notice.

BALANCE SHEET ITEMS	A. Domestic								
		Non-MFIs							
			Other resident sectors						
							Households + non-profit institutions serving households (S.14 + S.15)		
	MFIs	General government	Total	Other financial intermediaries + financial auxiliaries (S.123+S.124)	Insurance corporations and pension funds (S.125)	Non-financial corporations (S.11)	Consumer credit	Lending for house purchase	Other (residual)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
ASSETS									
1 Cash									
1e of which euro									
2 Loans									
up to 1 year									
over 1 and up to 5 years									
over 5 years									
2e of which euro									
3 Securities other than shares									
3e Euro									
up to 1 year									
over 1 and up to 2 years									
over 2 years									
3x Foreign currencies									
up to 1 year									
over 1 and up to 2 years									
over 2 years									
4 MMF shares/units									
5 Shares and other equity									
6 Fixed assets									
7 Remaining assets									

BALANCE SHEET ITEMS	B. Other participating Member States									C. Rest of the world	D. Not allocated
		Non-MFIs									
			Other resident sectors								
							Households + non-profit institutions serving households (S.14 + S.15)				
	MFIs	General government	Total	Other financial intermediaries + financial auxiliaries (S.123+S.124)	Insurance corporations and pension funds (S.125)	Non-financial corporations (S.11)	Consumer credit	Lending for house purchase	Other (residual)		
	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
ASSETS											
1 Cash											
1e of which euro											
2 Loans											
up to 1 year											
over 1 and up to 5 years											
over 5 years											
2e of which euro											
3 Securities other than shares											
3e Euro											
up to 1 year											
over 1 and up to 2 years											
over 2 years											
3x Foreign currencies											
up to 1 year											
over 1 and up to 2 years											
over 2 years											
4 MMF shares/units											
5 Shares and other equity											
6 Fixed assets											
7 Remaining assets											

	Reserve base (excluding negotiable instruments), calculated as the sum of the following columns in Table 1 (Liabilities): (a)-(b)+(c)+(d)+(e)+(j)-(k)+(l)+(m)+(n)+(s)
DEPOSIT LIABILITIES **(Euro and foreign currencies combined)**	
TOTAL DEPOSITS **9.1e + 9.1x** **9.2e + 9.2x** **9.3e + 9.3x** **9.4e + 9.4x**	
of which: **9.2e + 9.2x with agreed maturity** over two years	
of which: **9.3e + 9.3x redeemable at notice** over two years	Voluntary reporting
of which: **9.4e + 9.4x repos**	

Furthermore, depending on the national collection systems and without prejudice to full compliance with the definitions and classification principles of the MFI balance sheet set out in Regulation ECB/2001/13, credit institutions subject to reserve requirements may alternatively report the data necessary to calculate the reserve base, except those on negotiable instruments, in accordance with the table below, provided that no bold printed positions of the previous table are affected.

Annex II to Regulation ECB/2001/13 contains specific and transitional provisions and provisions on mergers involving credit institutions in respect of the application of the minimum reserve system.

Annex II to Regulation ECB/2001/13 includes, in particular, a reporting scheme for credit institutions in the 'tail'. Credit institutions in the tail have to report, as a minimum, quarterly data necessary to calculate the reserve base in accordance with Table 1a. These institutions ensure that the reporting according to Table 1a is fully consistent with the definitions and classifications applicable in Table 1. The tail institutions' reserve base data for three reserve maintenance periods are based on end-of-quarter data collected by the national central banks.

The annex also includes provisions on reporting on a consolidated basis. On receiving authorisation from the ECB, credit institutions subject to minimum reserves may carry out consolidated statistical reporting for a group of credit institutions subject to minimum reserves within a single national territory, provided that all the institutions concerned have renounced the benefit of any lump-sum allowance from the reserve requirement. The benefit of the lump-sum allowance remains, however, for the group as a whole. All the institutions concerned are included separately in the ECB's List of MFIs.

TABLE 1A

Data required from small credit institutions, to be provided at a quarterly frequency for minimum reserve requirements

	Reserve base calculated as the sum of the following columns in Table 1 (Liabilities): (a)-(b)+(c)+(d)+(e)+(j)-(k)+(l)+(m)+(n)+(s)
DEPOSIT LIABILITIES **(Euro and foreign currencies combined)**	
9 TOTAL DEPOSITS **9.1e + 9.1x** **9.2e + 9.2x** **9.3e + 9.3x** **9.4e + 9.4x**	
of which: **9.2e + 9.2x with agreed maturity** over two years	
of which: **9.3e + 9.3x redeemable at notice** over two years	Voluntary reporting
of which: **9.4e + 9.4x repos**	
	Outstanding issues, column (t) in Table 1 (Liabilities)
NEGOTIABLE INSTRUMENTS **(Euro and foreign currencies combined)**	
11 DEBT SECURITIES ISSUED **11e + 11x with agreed maturity** up to two years	
11 DEBT SECURITIES ISSUED **11e + 11x with agreed maturity** over two years	

Furthermore, the annex includes provisions to be applied in the case of mergers involving credit institutions. The terms “merger”, “merging institutions” and “acquiring institution” have the meaning determined in Regulation ECB/2003/9. For the maintenance period within which a merger takes effect, the reserve requirements of the acquiring institution are calculated and have to be fulfilled as set out in Article 13 of said Regulation. For consecutive reserve maintenance periods, the reserve requirements of the acquiring institution are calculated on the basis of a reserve base and of statistical information in accordance with specific rules (see the table in the Appendix to Annex II to Regulation ECB/2001/13), if applicable. Otherwise, the normal rules for the reporting of statistical information and the calculation of reserve requirements, as set out in Article 3 of Regulation ECB/2003/9, apply. Moreover, the relevant national central bank may authorise the acquiring institution to fulfil its obligation to report statistical information through temporary procedures. This derogation from normal reporting procedures must be limited to the minimum time possible and, in any case, should not exceed six months after the merger has taken effect. This derogation is without prejudice to the obligation for the acquiring institution to fulfil its reporting obligations in accordance with Regulation ECB/2001/13 and, if applicable, its obligation to assume the reporting obligations of merging institutions. The acquiring institution has the obligation to inform the relevant national central bank, once the intention to merge has become public and in good time before the merger takes effect, of the procedures that it intends to implement to fulfil its statistical reporting obligations relating to the determination of reserve requirements.

6. *Verification and compulsory collection*

The ECB itself and the national central banks normally exercise the competence to verify and compulsorily collect statistical information whenever minimum standards for transmission, accuracy, conceptual compliance and revisions are not fulfilled. These minimum standards are set out in Annex IV to Regulation ECB/2001/13.

7. *Non-participating Member States*

As a regulation under Article 34.1 of the Statute does not confer any rights or impose any obligations on Member States with a derogation (Article 43.1 of the Statute) and on Denmark (Article 2 of the Protocol on certain provisions relating to Denmark) and is not applicable to the United Kingdom (Article 8 of the Protocol on certain provisions relating to the United Kingdom of Great Britain and Northern Ireland), Regulation ECB/2001/13 is applicable only in the participating Member States.

However, Article 5 of the Statute concerning the competence of the ECB and the national central banks in the field of statistics and Regulation (EC) No 2533/98 are applicable in all Member States. This also implies, together with Article 10 (ex Article 5) of the Treaty, an obligation on the non-participating Member States to design and implement at the national level all the measures that they consider appropriate in order to carry out the collection of statistical information needed to fulfil the ECB's statistical reporting requirements and the timely preparations in the field of statistics in order for them to become participating Member States. This obligation has been made explicit in Article 4 and Recital No 17 of Regulation (EC) No 2533/98. For reasons of transparency, this special obligation is recalled in the recitals of Regulation ECB/2001/13.

ANNEX 5

Eurosystem websites

Central bank	Website
European Central Bank	www.ecb.int
Nationale Bank van België/Banque Nationale de Belgique	www.nbb.be or www.bnb.be
Deutsche Bundesbank	www.bundesbank.de
Bank of Greece	www.bankofgreece.gr
Banco de España	www.bde.es
Banque de France	www.banque-france.fr
Central Bank and Financial Services Authority of Ireland	www.centralbank.ie
Banca d'Italia	www.bancaditalia.it
Banque centrale du Luxembourg	www.bcl.lu
De Nederlandsche Bank	www.dnb.nl
Oesterreichische Nationalbank	www.oenb.at
Banco de Portugal	www.bportugal.pt
Suomen Pankki — Finlands Bank	www.bof.fi

ANNEX 6

Procedures and sanctions to be applied in the event of non-compliance with counterparty obligations

1. *Financial penalties*

In the event of an infringement by a counterparty of tender rules ([1]), of bilateral transaction rules ([2]), of the rules for the use of underlying assets ([3]), or of end-of-day procedures and access conditions for the marginal lending facility ([4]), the Eurosystem shall apply financial penalties as follows:

(a) For infringements of rules related to tender operations, bilateral transactions and the use of underlying assets, for the first and the second infringements that occur within a 12-month period a financial penalty shall be applied to each infringement. The financial penalties that can be applied shall be computed at the marginal lending rate plus 2.5 percentage points.

For infringements of rules related to tender operations and bilateral transactions, the financial penalties shall be calculated on the basis of the amount of collateral or cash which the counterparty could not settle, multiplied by the coefficient 7/360.

For infringements of rules related to the use of underlying assets, the financial penalties shall be calculated on the basis of the amount of ineligible assets (or assets that may not be used by the counterparty), which are either: (i) provided by the counterparty to a national central bank or the ECB, or (ii) not removed by the counterparty after 20 working days following an event after which the eligible assets become ineligible or may no longer be used by the counterparty, multiplied by the coefficient 1/360.

(b) The first time the rules for end-of-day procedures or for access to the marginal lending facility are infringed, the financial penalties that can be applied shall be computed at 5 percentage points. In the event of repeated infringements, the penalty interest rate shall be increased by a further 2,5 percentage points each time this occurs within a 12-month period, calculated on the basis of the amount of the unauthorised access to the marginal lending facility.

2. *Non-financial penalties*

The Eurosystem shall suspend a counterparty for infringements of rules related to tender operations and bilateral transactions, and of rules for underlying assets as set out below:

2.1. Suspension after infringements of rules related to tender operations and bilateral transactions

If a third infringement of the same type occurs within a 12-month period, the Eurosystem shall suspend counterparties from the subsequent open market operation(s) of the same type and executed under the same procedures, to be initiated during a certain period, in addition to a financial penalty calculated in accordance with the rules outlined in Section 1. The suspension shall be applied in accordance with the following scale:

(a) if the amount of non-delivered collateral or cash is up to 40 % of the total collateral or cash to be delivered on the occasion of the third infringement, a suspension of one month shall be applied;

(b) if the amount of non-delivered collateral or cash is between 40 % and 80 % of the total collateral or cash to be delivered on the occasion of the third infringement, a suspension of two months shall be applied; and

([1]) This applies if a counterparty is unable to transfer a sufficient amount of underlying assets to settle the amount of liquidity it has been allotted in a liquidity-providing operation or if it is unable to deliver a sufficient amount of cash to settle the amount it has been allotted in a liquidity-absorbing operation.

([2]) This applies if a counterparty is unable to deliver a sufficient amount of eligible underlying assets or if it is unable to deliver a sufficient amount of cash to settle the amount agreed in bilateral transactions.

([3]) This applies if a counterparty is using assets that are or have become ineligible (or that it may not use) to secure an outstanding credit.

([4]) This applies if a counterparty has a negative balance on the settlement account at the end of the day and does not fulfil the access conditions for the marginal lending facilities.

(c) if the amount of non-delivered collateral or cash is between 80 % and 100 % of the total collateral or cash to be delivered on the occasion of the third infringement, a suspension of three months shall be applied.

These financial penalties and suspension measures shall also apply, without prejudice to subsection 2.3 below, to any other successive infringement during each 12-month period.

2.2. Suspension after infringements of rules for underlying assets

If a third infringement occurs within a 12-month period, the Eurosystem shall suspend the counterparty from the subsequent open market operation, in addition to a financial penalty calculated in accordance with Section 1 above.

These financial penalties and suspension measures shall also apply, without prejudice to subsection 2.3 below, to any other successive infringement during each 12-month period.

2.3. Suspension from access to all future monetary policy operations for a certain period in exceptional cases

In exceptional cases where required on account of the seriousness of the case(s) of non-compliance, and taking into account in particular the amounts involved, the frequency or the duration of the cases of non-compliance, consideration could be given, in addition to a financial penalty calculated in accordance with Section 1 above, to the suspension of a counterparty from access to all future monetary policy operations for a period of three months.

2.4. Institutions located in other Member States

The Eurosystem may also decide whether the suspension measure proposed to be taken vis-à-vis the non-compliant counterparty should also apply to branches of the same institution located in other Member States.'