

## Box I

### Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 September 2001

During the reserve maintenance period from 24 August to 23 September 2001, the Eurosystem settled four main refinancing operations (MROs), one longer-term refinancing operation, and two fine-tuning operations.

The MROs were carried out as variable rate tenders with a minimum bid rate. In the first MRO, the minimum bid rate was 4.50%, in the second and third it was 4.25%, and in the fourth 3.75%. The allotted volumes ranged between €61 billion and €82 billion. The ratio of the amount bid to the volume allotted varied between 1.04 and 1.95, the average being 1.54. In the first MRO, the marginal and the weighted average rates equalled the minimum bid rate. In the second operation, the marginal and the weighted average rates were two and three basis points above the minimum bid rate, respectively, while in the third and fourth operations the corresponding spreads were one and two basis points. The number of participating counterparties ranged between 295 and 341, with an average of 326.

On 29 August, the Eurosystem conducted a longer-term refinancing operation through a variable rate tender with a pre-announced allotment volume of €20 billion. A total of 214 counterparties participated in the operation, submitting a total bid amount of €37.8 billion. The marginal and the weighted average rates were 4.20% and 4.23%, respectively.

In order to support the normal functioning of the markets and to provide liquidity after the terrorist attacks in the United States on 11 September, the ECB conducted fine-tuning operations on both 12 and 13 September. These were carried out as liquidity-providing reverse operations with same-day settlement and one-day maturity. Furthermore, they were conducted as quick tenders at a fixed rate of 4.25%. In both operations, the ECB satisfied all bids. In the first operation, bids amounted to €69.3 billion, with 63 counterparties participating. In the second operation, 45 counterparties submitted bids totalling €40.5 billion. Moreover, on 12 September the US Federal Reserve System and the ECB agreed on a swap arrangement, under which the ECB was eligible to draw up to USD 50 billion of deposits at the Federal Reserve Bank of New York against an equivalent amount of euro deposits at the ECB. The purpose of the agreement was to provide dollar liquidity to those euro area banks whose operations were temporarily affected by the market disturbances.

During the first days of the reserve maintenance period, the EONIA was stable at around 4.50%. However, it started to decline in the run-up to 30 August, when the Governing Council decided to lower the key ECB interest rates by 0.25 percentage point, and reached 4.28% on 7 September. As an indirect result of the terrorist attacks on 11 September, overnight rates rose sharply to the level of the marginal lending rate on the morning of 12 September. Later on that day, following the injection by the ECB of additional liquidity through a fine-tuning operation, overnight rates normalised and, at the end of the day, the EONIA, which measures the average interest rate during the day, had recorded an increase of only 13 basis points, to 4.42%. Tensions in the money market abated further following the fine-tuning operation on Thursday 13 September and the EONIA declined to a level close to the minimum bid rate of 4.25%. The bid-ask spreads quoted in the overnight market, however, only returned to normality at the beginning of the following week. On the afternoon of Monday 17 September, the Governing Council decided to lower its key interest rates by 0.50 percentage point. The EONIA dropped on the following day to 3.76%, just above the new minimum bid rate in the Eurosystem's main refinancing operations of 3.75%. Amid ample liquidity, the EONIA continued to decrease in the last days of the reserve maintenance period. On Friday 21 September, the last business day of the period, the EONIA stood at 3.12%, and a net recourse to the deposit facility of €2.9 billion confirmed the ample liquidity situation.

The net liquidity-absorbing impact of the autonomous factors (i.e. the factors not related to monetary policy) on the banking system's liquidity (item (b)) averaged €84.6 billion. The daily sum of autonomous factors

fluctuated between €73.6 billion and €100.5 billion. The estimates of average liquidity needs stemming from autonomous factors published for the maintenance period under review ranged between €74.3 billion and €87.0 billion. The published figures deviated from the actual outcome by an amount ranging from €0.1 billion to €7.8 billion. The exceptionally large deviation of €7.8 billion for the period from 10 to 18 September was due, inter alia, to the withdrawal of liquidity resulting from the foreign exchange swaps between the Eurosystem and some counterparties in the euro area, matched by recourse to the swap agreement set up between the Federal Reserve and the ECB in the aftermath of the events of 11 September. These events could not, of course, have been anticipated on 10 September, the publication date of the estimate.

### Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 August to 23 September 2001

	Liquidity providing	Liquidity absorbing	Net contribution
<b>(a) Monetary policy operations of the Eurosystem</b>	<b>211.1</b>	<b>0.4</b>	<b>+ 210.7</b>
Main refinancing operations	147.1	-	+ 147.1
Longer-term refinancing operations	60.0	-	+ 60.0
Standing facilities	0.5	0.4	+ 0.1
Other operations	3.5	0.0	+ 3.5
<b>(b) Other factors affecting the banking system's liquidity</b>	<b>401.3</b>		<b>- 84.6</b>
Banknotes in circulation	-	335.4	- 335.4
Government deposits with the Eurosystem	-	45.2	- 45.2
Net foreign assets (including gold)	401.3	-	+ 401.3
Other factors (net)	-	105.3	- 105.3
<b>(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)</b>			<b>126.1</b>
<b>(d) Required reserves</b>			<b>125.3</b>

Source: ECB.

Totals may not add up due to rounding.